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Gratitude, referring to a dispositional trait to appropriately show gratefulness to a benefactor for a gift or help received (Tudge, Freitas, & O'Brien, 2015), has been viewed as a moral virtue by philosophers and psychologists (e.g., Carr, Morgan, & Gulliford, 2015; McConnell, 1993, 2016). According to Tudge and colleagues, gratitude, as a moral virtue occurs when the beneficiary recognizes that a benefit is freely and intentionally provided by a benefactor, and the beneficiary autonomously repay the benefactor with something that the benefactor wants or needs if an opportunity presents itself.

Gratitude, like any virtue, is not innate. Possessing virtuous gratitude requires one to understand the motivation and intentionality behind the benefits, knowing what might be the appropriate responses in a given situation, and to be able to think and act autonomously (Morgan & Gulliford, 2018; Tudge, Freitas, & O'Brien, 2015). To acquire these sociocognitive abilities and experiences, actively engaging in increasingly complex and relevant practices is necessary. Through these practices, one also gradually internalizes standards that are morally required and highly valued by the cultural group to which he/she belongs. Therefore, the development of virtuous gratitude is driven by the synergistic effects of different factors, such as sociocognitive abilities, cultural values, and everyday interactions between parents and children.

The purpose of the present study is to have a better understanding of children's expressions of gratitude and their relations with parental values and parenting in China and the United States. First, the present research investigated the expression of gratitude

among 520 Chinese youth ($M = 10.60$ years, $SD = 2.09$; 56.0% female) and 489 North American youth ($M = 10.28$ years, $SD = 2.11$; 53.8% female). Consistent with what I had expected, Chinese children were less likely to express concrete gratitude, and more likely to express connective gratitude than were the North American children. Additionally, different age-related patterns of expressions of verbal, concrete, and connective gratitude were found. Across societies, older children were more likely to express connective gratitude and less likely to express concrete gratitude than were their younger counterparts.

Beyond that, I examined the association between parental values for their children and children's expressions of gratitude. However, results did not support the hypothesis that parents' values of autonomy and relatedness would be associated with children's expressions of connective gratitude. Findings indicated that parental values and gratitude expression were related in different ways in the Chinese and the U.S. sample. Parental values of separateness negatively predicted expression of concrete gratitude among Chinese participants, whereas in the U.S. sample, separated values were negatively associated with connective gratitude.

Furthermore, by interviewing 29 North American and 19 Chinese families, I identified strategies that parents used to promote gratitude in China and the United States. In line with what had been predicted, results indicated that both the Chinese and the U.S. parents used various kinds of strategies, including role modeling, discussion about gratitude, and reinforcing gratitude expression behaviors. Moreover, Chinese parents emphasized the importance of expressing gratitude to family and relatives and regarded

expressing gratefulness to family members as an effective strategy to foster gratitude in children.

Additionally, I explored the relation between children's expressions of gratitude and their wishes. Consistent with the hypothesis, findings of the present study suggested that children's social-oriented wishes were significantly associated with connective gratitude for both the Chinese and the U.S. children. Finally, a positive relation between connective gratitude and preferences to give to charity has been found among Chinese children. However, no significant relations between gratitude and spending preferences were found among the North American youth.

Findings of the present study provide important educational implications for educators and practitioners aiming to develop effective intervention programs for character development. This study also greatly advances the understanding of the ways in which culture influences the development of virtuous gratitude.

CHILDREN'S EXPRESSIONS OF GRATITUDE AND THEIR RELATIONS WITH
PARENTAL VALUES AND PARENTING: INSIGHTS FROM
CHINA AND THE UNITED STATES

by

Yue Liang

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CHAPTER I

INTRODUCTION

Gratitude, referring to a persisting and reliable disposition to appropriately show sincere gratefulness to a benefactor for a favor received or a gift given (Tudge, Freitas, & O'Brien, 2015), has been designated as an essential moral virtue by philosophers and psychologists (e.g., Carr, Morgan, & Gulliford, 2015; Cicero 54 BC/ 2009, p. 80; McConnell, 1993, 2016). According to Tudge and colleagues, gratitude as a moral virtue is characterized by three features: (1) the beneficiary recognizes that the benefit is provided by a benefactor, (2) this benefit is freely and intentionally provided to the beneficiary, and (3) the beneficiary takes the benefactor's wishes into consideration and autonomously wants to try to repay the benefactor with something that the benefactor wants or needs if an opportunity presents itself.

Gratitude, like any virtue, is not innate. Possessing a virtue means that one understands what it means to be virtuous and appropriately applies it in different circumstances (Annas, 2011; Aristotle, 2001; Hughes, 2013). To become virtuous, actively engaging in increasingly complex and relevant practices is necessary. Through these practices, one not merely gains certain sociocognitive abilities and experiences of how to think and act in accordance with the principals of moral virtue, but also internalizes standards that are morally required. These processes make it possible for one to gradually acquire the abilities to reason, feel, and act virtuously. Considering

gratitude, possessing virtuous gratitude requires one to understand the motivation and intentionality behind the benefits, knowing what might be the appropriate responses in a given situation, and to be able to think and act autonomously (Morgan & Gulliford, 2018; Tudge, Freitas, & O'Brien, 2015). Given that children and adolescents lack certain kinds of sociocognitive abilities and experiences of expressing gratefulness in different circumstances, they are only capable of expressing a limited version of gratitude. Therefore, the development of virtuous gratitude not merely needs time, but also requires cultivation and encouragement.

Bioecological theory (Bronfenbrenner & Morris, 1998, 2006), which explicates human development provides insights for understanding the development of gratitude in children and adolescents. Bronfenbrenner argued that effective ways of studying human development involve considering the four aspects of his PPCT model, namely proximal processes, person characteristics, context, and time.

Proximal Processes

According to Bronfenbrenner, proximal processes are regarded as the engine of human development (Bronfenbrenner & Evans, 2000). Proximal processes refer to the everyday activities and the reciprocal interactions in which a developing individual engages. By engaging in progressively complex interactions and activities over an extended period of time, the developing individual acquires knowledge, skills, and other positive developmental outcomes. Proximal processes, particularly interactions between children and parents, play an essential role in the development of virtuous gratitude. Young children start to gain an understanding of what gratitude means and when

expressing gratitude is appropriate by watching their role models (e.g., parents) saying “thank you” and repaying their benefactors when they receive benefits. Children are also encouraged by their parents to express gratitude to someone who has given them something or has helped them. Parents’ motivation and instruction regarding how to appropriately express gratitude are necessary as children grow up and encounter increasingly complex situations which require a lot of cognitive processing and careful reasoning.

Previous empirical studies have pointed to the pivotal role of interactions between parents and children in the development of gratitude (e.g., Bono & Odudu, 2016; Hussong, Langley, Coffman, Halberstadt, & Costanzo, 2018; Li, 2015; Rothenberg et al., 2016). Parent–child interactions, such as acting as role models, reinforcing child grateful expression, and discussions regarding grateful expression have been identified as essential to foster the development of gratitude in children and adolescents.

Person

In the bioecological theory (Bronfenbrenner & Morris, 1998, 2006), person characteristics are another critical aspect of human development. Bronfenbrenner maintained that person characteristics are both products and producers of development. One type of person characteristic that has profound influence on the development of virtuous gratitude is cognitive ability. According to Piaget (1932/1960), children’s moral development goes hand-in-hand with cognitive development. Around age 7 or 8, children find it hard to think abstractly and understanding others’ motivations and intentionality, and have more difficulty taking others’ perspectives; thus, it is harder for

them to know the intentions behind the benefaction, and they may express gratefulness verbally, or repay people who have helped them or have given them gifts freely with something they themselves like rather than thinking about what the benefactor might like or need. Additionally, for children as young as age 7 or age 8, moral rules may still be regarded as adults' commands, which are fixed and cannot be changed. Children express gratitude because their parents instruct them to say "thank you" when they have received benefits from others. Although saying "thank you" or any repayment behaviors are more likely to be treated as a heteronomous obligation by children at this stage, they start to get sense of what they should do when they receive benefits from someone.

From around age 12, children are more capable of thinking abstractly and understanding others' intentionality. They are much more likely to view rules as mutual agreements for fairness; thus, they respect and obey the rules autonomously, recognizing their usefulness. Children from this age become increasingly capable of understanding benefactors' intentionality and expressing gratitude to their benefactors in appropriate ways. However, as they lack experience of evaluating the risks and costs involved in the benefit provided by the benefactor as compared to adults, adolescents place more emphasis on the relation between the value of the benefit and gratitude (Morgan & Gulliford, 2018). Therefore, when encountering situations that require more experience of expressing gratitude, adolescents may not generate appropriate responses to their benefactors.

Empirical studies have demonstrated that children's cognitive abilities are related to their understanding and expressions of gratitude (Morgan & Gulliford, 2018; Nelson et

al., 2012; Poelker & Kuebli, 2014). For example, Nelson and colleagues (2012) examined developmental precursors to preschoolers' understanding of gratitude, and found that preschoolers who were more capable of understanding others' emotion and mental states had a better understanding of gratitude. Baumgarten-Tramer (1938) found that the ways in which older children expressed gratitude to a hypothetical benefactor who would grant their greatest wish were more complex than the ways in which younger children did. Specifically, older children were more likely than their younger counterparts to express gratitude that took the hypothetical benefactor's wishes into consideration. Similar patterns of gratitude expression have been found in Brazil, China, Turkey, and the United States (Merçon-Vargas, 2017; Payir, Zeytinoglu, & Palhares, 2017; Tudge, Freitas, Mokrova, Wang, and O'Brien, 2015; Wang, Wang, & Tudge, 2015).

Context

Context is another factor that has significant effects on human development in bioecological theory (Bronfenbrenner & Morris, 1998, 2006). Family contexts are among the most salient predictors of positive development in children and adolescents, as parents are generally the primary socialization agents (Maccoby, 2007). Within the family, children are confronted with moral issues, and have opportunities to discuss obligations, rights, and justice with their parents and siblings (Tizard & Hughes, 2002). Moreover, learning materials and cognitive stimulations provided by parents profoundly influence children's cognitive development (Devine, Bignardi, & Hughes, 2016), which

is linked to the development of moral cognition and moral actions (Baird & Astington, 2004).

Cultural contexts which provide the settings where proximal processes take place are also deeply implicated in human development (Tudge, 2008). Culture refers to “a group of people who share a set of values, beliefs, and practices; who have access to the same institutions, resources, and technologies; who have a sense of identity of themselves as constituting a group; and who attempt to communicate those values, beliefs, and practices to the following generation” (Tudge, 2008, p. 4). According to Tudge, culture influences the types of activities that are valued, as well as the manner of interaction among people.

Moral virtues are reflections of desirable values and socialization goals of a cultural group, because they are characteristics that members of the cultural group highly value. Gratitude as a moral virtue has been given a central position in most cultures; however, the extent to which it is valued, the appropriate ways that it is expressed, and the strategies that parents use to promote their children’s gratitude may differ according to a society’s cultural values (Merçon-Vargas, 2017; Tudge, Freitas, O’Brien, 2015).

As appropriately expressing gratitude requires one to understand the benefactor’s intentionality and wishes (relatedness), and autonomously to reciprocate (autonomy), parents’ socialization of relational and autonomous values in their children are crucial to the development of virtuous gratitude. Kağıtçıbaşı’s (2007) orthogonal model of cultural differences provides insight into mechanisms through which cultural values influence the expression of gratitude across cultural groups. According to Kağıtçıbaşı, there are two

dimensions of cultural values and self: agency (ranging from autonomy to heteronomy) and interpersonal distance (ranging from relatedness to separateness). Parents in western societies, such as the United States, attach high value to autonomy and separation; educated parents living in the urbanized areas of developing countries and non-western developed countries (regarded as the “majority world” by Kağıtçıbaşı) mostly value autonomy and relatedness; and those living in the rural areas of the “majority world” value heteronomy and relatedness. Cultural differences in parental values for their children may reflect strategies that parents use to socialize their children, which may influence the way in which children express gratitude.

From Kağıtçıbaşı’s (2007) perspective, it is possible that children in societies that encourage children to think and act autonomously and to consider others’ feelings may express gratitude by taking the benefactor’s wishes into consideration and repaying the benefactor autonomously. Wang and her colleagues (2015) found that as compared to children in the United States, the Chinese children in their sample were more likely to express connective gratitude, a type of gratitude closest to virtuous gratitude as the benefactor’s intentionality and wishes are taken into account by the beneficiary.

Time

In addition to the aforementioned factors, it is necessary to consider the influence of time on the development of gratitude. Only if everyday activities occur over a period of time and become increasingly complex can children acquire sociocognitive abilities and experiences regarding gratitude expression.

Additionally, Bronfenbrenner (Bronfenbrenner & Morris, 1998, 2006) suggested that historical time should be taken into account when considering the impact of culture on human development. In Kağıtçıbaşı and Ataca's (2005) study about three generations of Turkish parents' values for their children, they found that, urbanization changed the way people were educated and employed, thus autonomy became increasingly important for success in school and workplace. Moreover, with urbanization and economic growth, children have no longer been considered as a source of old-age security for parents, thus the psychological value of children increased. Therefore, educated urban parents in Turkey valued psychological relatedness and autonomy for their children to maximize their success in urban areas. In contrast, the older generation and people grew up in rural areas, who were less affected by urbanization and less educated, tended to value heteronomy and relatedness.

Theoretical frameworks delineating human development and empirical studies examining how virtuous gratitude develops and could be cultivated contribute to our understanding of gratitude development in child and adolescent. They pave the way for further empirical examination of how sociocognitive development and parent-child interactions are related to the development of virtuous gratitude.

However, several gaps await to be addressed. First, the previous study on Chinese children's expressions of gratitude used a sample collected in southern China. To the author's knowledge, this is the only published study that views gratitude as a moral virtue and examines gratitude expression in Chinese youth. Given that the Chinese results reported by Wang et al. (2015) were strikingly different from the results in

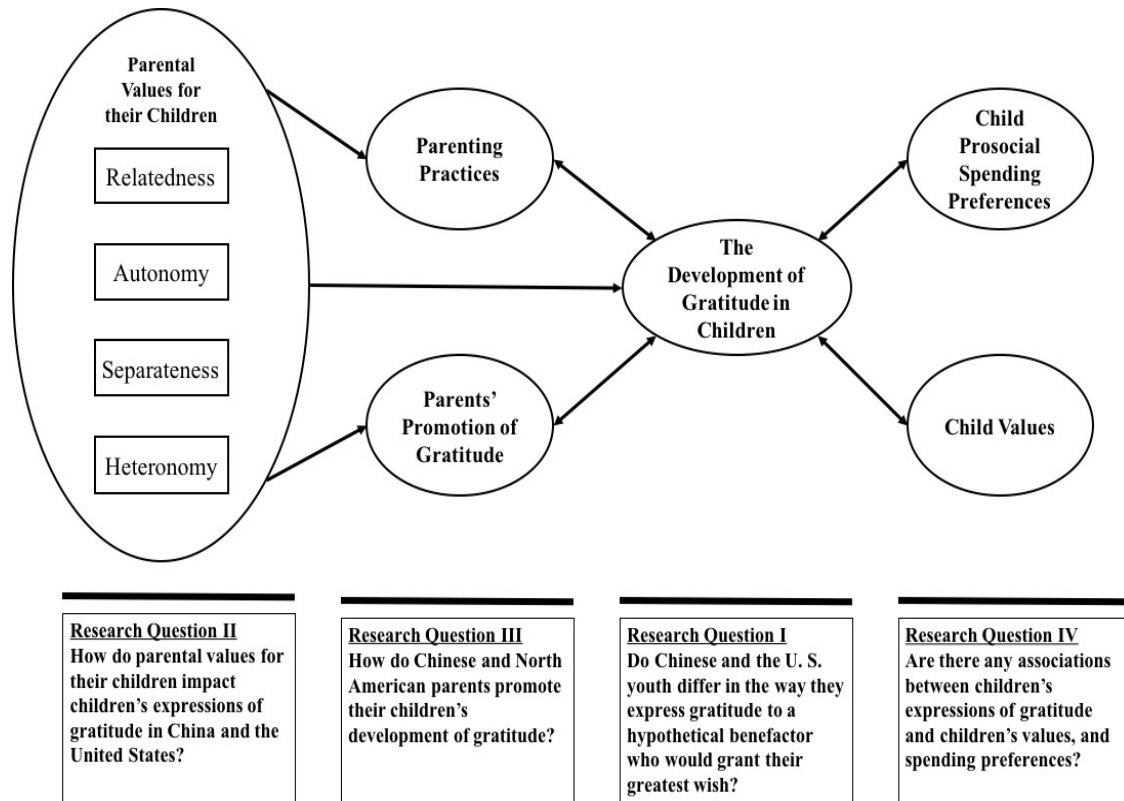
Switzerland, the US, and Brazil, it would be helpful to replicate the study with another Chinese sample. Second, as parental values of autonomy and relatedness impact the development of virtuous gratitude, and there are potential cultural differences in these values in China and the United States, it is of great value to examine relations between parental values and expression of gratitude in children and adolescents in these two societies. Third, informed by Bronfenbrenner's (Bronfenbrenner & Morris, 1998, 2006) bioecological theory, interactions between parents and children are among the most salient factors that influence child development. Moreover, the manner of parent-child interactions and types of everyday activities that occur are influenced by cultural values (Tudge, 2008). However, how parents promote their children's expressions of gratitude in China and the United States is not well studied. Specifically, previous studies on the role of parenting and its relation to gratitude expression have focused on North American middle-class families (e.g., Ronthenberg et al., 2016), very little work has examined how parents from different racial/ethnic groups, let alone societies, foster children's expressions of gratitude.

To address these gaps, the main goals of the present research are: (1) to investigate cultural similarities and differences in expressions of gratitude among Chinese and U. S. children and adolescents; (2) to examine the association between parental values and children's expressions of gratitude in China and the United States; (3) to identify strategies that parents use to promote gratitude in China and the United States; (4) to investigate relations between gratitude and materialism and spending preferences among Chinese and the North American youth.

The present study is designed to make four substantive contributions. First, the examination of cultural variations in gratitude expression provides important educational implications for educators and practitioners aiming to develop effective intervention programs for character development. Second, the investigation of the association between parental values and gratitude expression greatly advances the understanding of the ways in which culture influences the development of virtuous gratitude. Third, accomplishment of the third aim provides important implications for developing culturally relevant interventions aiming to teach and cultivate virtuous gratitude in youth. Finally, given that materialism is related to compromising individual wellbeing and negatively affects interpersonal relationships, the examination of gratitude as a protective factor may inform intervention and prevention programs to incorporate gratitude-promotion strategies to dilute the negative effect of materialism.

The present dissertation consists of six chapters. In the second chapter, I discuss the neo-Aristotelian perspective of moral virtues and theoretical frameworks to understanding how different factors synergistically work together to influence the development of gratitude. Next, in the third chapter, I review current conceptualization of gratitude as well as the development of gratitude. Additionally, children's expression of gratitude and its relations with parental values for their children, parenting, and spending preferences are addressed. In the fourth chapter, the methodology and the measures that were used in the present study are described. The results are presented in the fifth chapter. In the sixth chapter, I discuss the research findings, address the limitations of the present research, and provide some future directions.

Figure 1. Research Questions.



CHAPTER II

THEORETICAL FOUNDATIONS

The Aristotelian Tradition of Virtue

In *Nicomachean Ethics* (2001), Aristotle presented an insightful account of how to achieve one's potential to live a fulfilled life. Fulfilment consists in living and acting virtuously. From an Aristotelian perspective, virtue can be viewed as a dispositional tendency to make good moral decisions, including both feeling and acting appropriately. This tendency is a deep feature of a person, to whom reasoning, acting, and feeling in a morally admirable way is reliable and persistent across different contexts (Annas, 2011). There are two types of virtue; one is moral virtue (virtues of character), and the other is practical wisdom (virtues of the mind).

Moral Virtue

Aristotle (2001) defined moral virtue as “the sort of state to do the best in connection with pleasures and pains, and vice the contrary” (p. 21). A virtuous person not merely has such an emotional state, but also to make decisions, and to do something in accordance with virtuous standards. People make judgments about whether a person is virtuous on the basis of his/her behaviors (Hughes, 2013). Without doing virtuous actions (e.g., temperate and just actions), one would not be considered to be virtuous. For instance, a generous person is consistently involved in generous activities (e.g., donating money to the poor, sharing what he/she has with others). More importantly, only if a

person is appropriately helping others according to his/her ability, not too much and not too little, can this person be considered as generous.

Additionally, according to Aristotle (2001), emotion, which reflects one's level of understanding of a certain circumstance, is another critical component of moral virtues (Hughes, 2013). Virtues are dispositional tendencies with a certain pattern of emotional response. These emotional responses profoundly influence people's moral judgments and actions. For example, feeling empathy with the poor motivates one to donate money and help people who are suffering from poverty. And these helping behaviors result in positive feelings, such as happiness. More importantly, these emotional responses do not exist at random, but occur consistently in different situations.

Several researchers have emphasized that gratitude should be conceptualized and understood as a virtue (e.g., McConnell, 1993; Tudge, Freitas, & O'Brien, 2015).

Although Aristotelian did not agree that gratitude was a virtue, from an Aristotelian perspective, gratitude possesses all features of a moral virtue. That is, a grateful person is grateful because she/he has developed in such a way that she/he feels, reasons, and behaves gratefully. First, a grateful person has some sense that being grateful to a received benefit and repaying her/his benefactor measures up to some moral standards that she/he has learned, comes to accept, and aspires to uphold, given that gratitude has already been part of her/his character (Shelton, 2004).

Second, a positive emotional response is another critical component of virtuous gratitude. When receiving a gift or help, grateful individuals always have positive emotional responses **toward their benefactor** who freely and intentionally provided the

help or gave the gift. It is important to note that the benefactor's intentionality matters in eliciting the beneficiary's grateful emotions. If the benefactor providing that benefit is doing so because he or she is forced to do so, or because she or he intends to gain something as a result, gratitude is not required from the beneficiary (McConnell, 1993; Tudge, Freitas, & O'Brien, 2015).

Additionally, Bonnie and de Waal (2004) noted that appreciation of a benefit is a necessary component of gratitude, but the emotional response of feeling good by itself is not sufficient. Being virtuously grateful requires the individual to be aware of her benefactor's intentionality, efforts and costs, and autonomously choose to repay her benefactor. As Wellman (1999) suggested, "a benefactor's benevolent expression of goodwill can give the beneficiary moral reasons to respond with similar goodwill, but these moral reasons do not leave the beneficiary bound by duty" (p. 286). Freely and wholeheartedly choosing to repay the benefactor means taking the benefactor's wishes and needs into consideration, and repaying the benefactor with something she wants. Therefore, being virtuously grateful is not the same as feeling indebtedness to the benefactor or mastering a technique to repay something of equal value to the benefactor (Russell, 2015; Tudge, Freitas, & O'Brien, 2015).

Taken together, gratitude exhibits all hallmarks of a moral virtue (Carr, 2015). It is a persisting and reliable disposition to act in a morally praiseworthy manner (Tudge, Freitas, & O'Brien, 2015). According to Tudge et al., there are three features of gratitude as a moral virtue: (a) it requires the beneficiary to recognize the benefit provided by a benefactor; (b) that this benefit is freely and intentionally provided to the beneficiary; and

(c) the beneficiary has to autonomously desire to reciprocate to the benefactor with something that the benefactor needs or wants if a suitable opportunity presents itself.

Practical Wisdom

Aristotle (2001) described the ways in which emotions and actions are involved in moral virtue. A habitual response is considered as morally virtuous only if the action and emotional states are appropriate in a given situation (Annas, 2011; Aristotle, 2001; Hughes, 2013). To be able to feel appropriate emotional states and act virtuously, one needs to acquire certain abilities to understand the current circumstance, what should be done, why what is done is done, and how to perform morally acceptable actions. The capacity of making good moral decision, and achieving a balanced emotional state is another type of virtue, that is, practical wisdom.

The exercise of practical wisdom necessarily involves the desire to promote good and to do something morally admirable (Hughes, 2013). A practically wise person is able to make morally acceptable decision and do something that is beneficial to others. Therefore, teaching virtuous action and requiring learners to repeat what a role model does is not enough for acquisition of practical wisdom. An agent should give reasons as to why an action is considered as virtuous and why this particular action should be performed in a given situation (Annas, 2011).

Additionally, practical wisdom is concerned with good will and the promotion of good; however, it is not merely about universals (Aristotle, 2001). An understanding of particulars is also an important component in practical wisdom. That is, a person with practical wisdom not merely wants to contribute to human well-being in general, and

knows how to do it, but also applies his or her knowledge and skills in different situation to reason, act, and feel virtuously. A practically wise person knows how to appropriately achieve morally desirable goals with the right emotional state and good intentions. Thus, when educating virtues, an agent should convey the universals to a learner, as well as teach the learner by giving examples, acting as a role model in different contexts, and requiring the learner to perform virtuous actions in different contexts (Annas, 2011). Through these learning experiences embedded in different contexts, learners may build up their own understanding of how to make morally desirable decision and perform actions in accordance with virtues.

Virtue is a dispositional tendency to reason, feel, and act in morally admirable ways (Annas, 2011; Aristotle, 2001; Hughes, 2013). That is, a virtuous person feels free to and aspires to live out these standards of virtues in different contexts, being conscious of and sensitive to their standards of goodness. When consciously endorsing this goodness, individuals feel a sense of self-appreciation and happiness for the goodness that is inside themselves (Shelton, 2004). As Aristotle (2001) suggested, in order to reliably make good moral decisions, achieve a balanced emotional state, as well as to do the right thing in different circumstances, one needs to be encouraged and to be motivated. It means virtue does not develop naturally, but needs careful cultivation. The cultivation of virtue may initially involve mimicking a role model's virtuous actions; however, learning to be virtuous is far more complicated than routinely and repeatedly doing what the role model does (Annas, 2011). It is crucial for a learner to know the reason for why his/her role model perform a certain virtuous action, how to think

morally, and how to appropriately achieve moral goals. As young children lack experience and practical wisdom, they are necessarily going to have a limited or reduced version of any virtue, but that it should become closer to the real virtue with different kinds of experience and the simultaneous growth of practical wisdom.

On the basis of viewing gratitude as a virtue, it is clear that features of gratitude are not innate. First, one has to gradually internalize moral standards and accept that feeling and expressing gratitude toward people who offer help or give a gift to one is a moral good. Second, one has to learn when and how feeling and expressing gratitude towards others is appropriate. That is to say, the encouragement of thinking and acting to in accordance with one's free will and the promotion of perspective-taking ability are beneficial to the development of virtuous gratitude.

Due to limits in sociocognitive abilities and lack of experiences, children (and even adolescents) are not likely to have virtuous gratitude. For example, as young children's abilities to understand others' perceptions are limited, saying "thank you" or giving a hug to their benefactors is considered appropriate for them to express gratitude. For adolescents, progression in thinking and reasoning abilities and the acquisition of different sorts of experiences contribute to their development of gratitude. Adolescents are able to repay their benefactors based on the benefactors' wishes. However, adolescents place more emphasis on the relation between the value of the benefit and gratitude, and they are less capable of evaluating the risk and cost involved in the benefit that provided by the benefactor as compared to adults (Morgan & Gulliford, 2017). For instance, adolescents may express the same level of gratitude towards a benefactor who

save their lives in a swimming pool, regardless of whether the benefactor is a lifeguard or someone who is not good at swimming. Thus, children and adolescents express a limited or reduced version of gratitude; however, this limited version of gratitude will become virtuous gratitude if it is adequately cultivated. Guidance from teachers and parents plays an essential role in this process. To acquire experiences of appropriately expressing gratitude in different situations, and to understand why expressing gratitude is necessary in a certain circumstance, one needs to learn from one's role models and practice with guidance from people around one.

In sum, gratitude is a dispositional tendency to reason, feel, and act gratefully in an appropriate way when receiving gifts or help from others. This dispositional tendency does not develop naturally, but needs encouragement and cultivation. Conceptualizing gratitude as a virtue is beneficial to understand the developmental trajectories of gratitude, and how relevant factors such as cultural values, parenting, and children's socioemotional development contribute to gratitude development across childhood and adolescence (Tudge, Freitas, & O'Brien, 2015). In addition, approaching gratitude as an educable virtue may provide valuable implications for developing interventions aiming to teach children how to appropriately feel and express gratitude in different circumstances (Carr, Morgan, & Gulliford, 2015).

Theoretical Frameworks to Understanding the Development of Virtuous Gratitude

The development of virtuous gratitude goes hand-in-hand with the development of social-cognitive abilities; however, it does not develop naturally (Tudge, Freitas, & O'Brien, 2015). According to Aristotle (2001; Hughes, 2013), to possess a virtue one has

to understand what it means to be virtuous, and to appropriately use it in different contexts. In order to become virtuous, actively engaging in its practices is necessary (Annas, 2011). These practices are not simply repetitions of daily routines. In the course of these practices, the learner has to know what is the best way to feel and act virtuously, and to understand why what is done each time. Given that young children lack life experiences and some social-cognitive abilities, some features of gratitude may not be found in childhood. Therefore, the development of virtuous gratitude not merely needs time, but also requires experiences and encouragement. The bioecological theory (Bronfenbrenner & Morris, 1998, 2006), which explicates how different factors synergistically work together to influence human development, provides insights for understanding influences on the development of gratitude in children and adolescents.

Proximal Processes

Proximal processes, or the everyday activities and the reciprocal interactions in which a developing individual engages over a period of time, are regarded as the engine of human development (Bronfenbrenner & Evans, 2000). These activities and reciprocal interactions should take place on a relatively regular basis, which is characterized by a period of time that is long enough for the increasing complexity of the interactive activity rather than mere repetition over a short duration. Results of these progressively more complex interactions over an extended period of time are people's acquisition of knowledge, skills, and other positive developmental outcomes.

Bronfenbrenner's (Bronfenbrenner & Morris, 1998, 2006) notion is consistent with the Aristotelian tradition of virtue, which maintains that virtues develop through

education and training (Annas, 2011). Young children will first learn that when people receive help or gift, they should learn how to express gratefulness to others by watching their role model (e.g., parents and teachers) saying “thank you” and repaying their benefactors in different circumstances. But this will not lead to gratitude, unless at the same time young children get a chance to practice expressing gratitude. Parents and teachers may encourage children to say “thank you” and do something for their benefactors, and explain why expressing gratitude is necessary in different contexts. Children start to gain understanding of why and when expressing their thankfulness is appropriate. However, saying “thank you” is not always appropriate in different contexts. As children grow up, they may encounter increasingly complex situations in which they may need motivation and instruction from their agents to appropriately express gratitude. As Annas noted, “virtue is understood in part by the way it is learnt, and that it is learnt always in an embedded context – a particular family, city, religion, and country” (p. 52).

Person Characteristics

Bronfenbrenner and Morris (1998, 2006) maintained that person characteristics not merely act as products of development, but also producers supporting the direction of proximal processes. One important type of person characteristic that significantly influence the moral development is cognitive abilities. Piaget’s (1932/1960) theory of moral development is a valuable approach to understand how cognitive development influences moral development, specifically the development of virtuous gratitude. Based on observations of children’s interactions in game playing and their moral judgments

regarding several scenarios, Piaget proposed that children's development of understanding rules goes through four stages: the stage of moral rules, egocentrism, incipient cooperation, and genuine cooperation. The development of morality takes place along with cognitive development.

The first stage involves merely motor rules and individual character. During this period, young children play marbles based on their desire and motor habits. They do several "experiments" to understand the physical characteristics of the marbles, and to adapt their old motor schemas to the new things that they encounter. For instance, they move marbles from one place to another, or use the marbles to make a nest. Children repeat the same gesture or motor behavior ritually, which gradually adds to their motor intelligence. However, during this phase, neither the process of adapting old schemas to new situations nor the process of incorporating the marbles into the old schemas is accompanied by a consciousness of duty and obligation.

The second stage is labeled "egocentrism," which is a transition between the individual and the social, and between the stage of motor rules and the stage of cooperation. For children in this period, imagination and language add to their motor schemas. For example, children imagine the marbles as food to be cooked or use a box as a moving car. As communication between children and people around them becomes increasingly possible, children's behaviors are influenced by others' behaviors or verbal instructions. They observe others' behaviors, and replicate what they see in an individualistic manner. To be specific, they play for themselves and do not try to influence or control their playmates. Children want to play in the same way as their

companions do, because they believe that their peers are following a certain rule. In doing so, children feel that they are submitting to an unchangeable law or to other authority figures. In sum, either through imitation or verbal communication, children start to learn concepts of rules. However, during the period of egocentrism, children look upon moral rules as sacred and cannot be changed. The second stage lasts from age 2 to 7. Linking this to gratitude, children during this stage may view gratitude as equal to saying “thank you” when receiving gifts, and regard it as an unchangeable rule required by the authority such as their parents and teachers. Piaget noted, of course, that this does not mean that children always follow these rule; however, when reasoning about them they are clear that the rules should be followed.

Around age 7 to 8, children take pleasure in doing better than their peers in the game. They also realize that, in order to win the game, they need to cooperate with their playmates based on common rules. Interactions and negotiation with peers contribute to a decrease in egocentrism and promote cooperation among children. Linking this to gratitude expression, at this stage, children may express gratitude spontaneously, and view repaying behaviors as a way to reciprocate their benefactors. However, as they are unable to think abstractly and less capable of understanding others’ intentionality and perceptions, they may express gratefulness verbally or repay their benefactors with something that they themselves like.

As children grow older, their consciousness and practice of rules evolves. At around age 12, children enter the formal operational stage of cognitive development. They are able to reason abstractly and come to realize that the rules can be changed if all

players of the game reach an agreement to do so. They even find pleasure in discussing and developing these rules. These shared rules are the products of mutual respects between the children and their playmates. As they make and develop the rules on the basis of a consensus of opinion, they are willing to autonomously obey these rules, rather than regarding these rules as a constraint of an authority figure. Considering gratitude, as adolescents understand that mutual respect is important in interpersonal interactions, and that the moral obligations are established based on internal principals, they are able to autonomously repay their benefactors with something that benefactors like or want.

What Piaget found about children's following of rules is just part of moral development in general. According to Piaget (1932/1960), the child's development of morality goes through two sequential stages, from moral heteronomy (heteronomous morality) to moral autonomy (or autonomous morality). The first stage results from the moral constraint of the adult, which is characterized by unilateral respect of moral rules. For children at this stage, moral rules are regarded as commands from the adults. Obeying the will of the adult is considered an obligation or a duty, which is essentially heteronomy. In children's minds, doing what the adult requires them to do is because it is right, not because it is good. According to Piaget, "the good" seems to result from cooperation and mutual respect, which is correlated with consciousness of autonomy. Considering gratitude, children express gratitude because their parents instruct them to say "thank you" and do something for the benefactor or they see their role model have done this when people have helped them or given them something. Children in this phase

start to get a sense of what they should do when they receive beneficences. However, saying “thank you” or any repayment behaviors is seen as a responsibility or a duty.

Progression in children’s social-cognitive abilities contributes to their development of morality. Around age twelve, children are able to think abstractly and see rules from others’ perspectives. Thus, they understand that rules are often formed by mutual agreements for fairness; their morality then becomes more autonomous and involves intentionality (Piaget, 1932/1960). They act based on their own values and what they believe should be done. Children in this period become capable of understanding benefactors’ intentionality and appropriately expressing gratitude to their benefactors.

Given that recognizing a benefactor’s intention and autonomously repaying the benefactor with something he/she wants or likes are critical features of gratitude, it is essential for the beneficiary to acquire theory of mind, empathy, and autonomy in order to develop a more complex version of gratitude. As children around age 7 are less capable of taking another’s perspective and engaging in autonomous activities, features of virtuous gratitude are highly unlikely to be present in early childhood (Tudge, Freitas, & O’Brien, 2015).

Therefore, it is important that parents and teachers foster gratitude in children using strategies in accordance with their children’s social-cognitive abilities and their abilities to understand moral rules. During the early childhood, children are unable to understand others’ intentionality and are at the stage of heteronomous morality. Parents may promote gratitude by encouraging children to say “thank you” when they have received gifts. They may even use incentives and punishments to help children

internalize this “rule.” As children acquire the ability of perspective taking and gradually enter the stage of autonomous morality, parents may start to convey children why expressing thankfulness is necessary and appropriate in a given context. Adolescents are increasingly capable of reasoning abstractly and acting autonomously; parents and teachers may thus foster gratitude in adolescents by encouraging them to think about circumstances in which expressing gratitude is appropriate, and by discussing values of gratitude with them.

Context

Contextual factors that impact human development include environments in which everyday activities take place, as well as the broader context. The family context has been identified by previous work as a salient influence on the child’s moral development, as parents are considered primary socialization agents for children and the saliency of parental influences maintains during childhood and even over the adolescent years (Maccoby, 2007). Within the family context, children face moral issues in their early years (Dunn, 2006). Additionally, children also have conversations with their parents about rights, obligations, and social rules (Tizard & Huges, 2002). Moreover, parents’ levels of moral reasoning and interactions styles in discussing moral issue significantly affect children’s moral reasoning abilities (Walker & Taylor, 1991). Furthermore, home learning environment, such as learning resources and stimulations related to cognitive development provided by parents, profoundly influence children’s cognitive development (Devine, Bignardi, & Hughes, 2016), which has a strong relation with moral development (Baird & Astington, 2004; Piaget, 1932/1960).

Cultural contexts of which children are a part are also relevant to the cultivation of virtuous gratitude. Culture refers to “a group of people who share a set of values, beliefs, and practices; who have access to the same institutions, resources, and technologies; who have a sense of identity of themselves as constituting a group; and who attempt to communicate those values, beliefs, and practices to the following generation” (Tudge, 2008, p. 4). However, Bronfenbrenner’s bioecological theory (Bronfenbrenner & Morris, 1998, 2006) does not give an adequate amount of attention to the role of culture in child development (Tudge, 2008), but primarily focuses on providing definitions of the four systems (i.e., microsystem, mesosystem, exosystem, and macrosystem) (Rosa & Tudge, 2013). He also implicitly assumes that proximal processes valued by North American middle-class communities are also valued by other cultural groups with different values, beliefs, and patterns of social interchange.

Tudge’s (2008) cultural-ecological theory addresses the limitation of bioecological theory and thoroughly discusses interconnections among individuals, everyday activities in which individuals participate, and social settings where individuals are situated. According to Tudge, the types of activities that occur and the ways in which people interact with each other are related to the values and beliefs individuals possess, which are affected by the cultural groups to which individuals belong.

Considering parental values and parenting practices, culture shapes the values that parents want for their children as adults (Greenfield & Suzuki, 1998; Keller et al., 2006; Super & Harkness, 2002), as well as affect the strategies that parents use to socialize their children to maximize children’s well-being and minimize perceived risks (Rosenthal &

Roer-Strier, 2001). Cultural values, as an important component of the cultural context, are considered as “desirable transsituational goals, varying in importance, that serve as guiding principles for actions in the life of a person” (Schwartz, 1994, p. 21). Cultural values influence how children are socialized and educated, and what traits and dispositions of children are cultivated by parents in order to help their children adequately function in the society (Kağıtçıbaşı, 2007; Roer-Strier & Rosenthal, 2001; Rosenthal & Roer-Strier, 2006). In this sense, moral virtues are reflections of desirable values and socialization goals of a cultural group, because they deal with characteristics that members of the cultural group highly value and spend energy to promote.

Additionally, according to Tudge (2008), individuals are not passively influenced by values and beliefs shared by members in the cultural group, cultural messages are transmitted to individuals from other members in the same cultural group, from media, and from symbols in the social settings; at the same time, individuals interpret these messages from their own perspectives. For example, the younger generation never copies or accepts all aspects of values and beliefs from the older generation; they also receive messages from other cultures and adapt their ideas and notions to their specific context. Thus, the way they interpret messages from their own cultural groups may gradually mean that their values become different from those of their parents. When the values and beliefs possessed by the younger generation become increasingly prevailing, the cultures undergo change.

Several theoretical approaches dealing with the cultural differences in values, beliefs, and lifestyles further explore how cultural differences influence the child

development. Much research in cross-cultural parental socialization goals draws on the individualism/collectivism distinction (Hofstede, 2001; Triandis, 1995), featuring opposite ends of a single dimension, and used widely when contrasting Western and East Asian cultures (e.g., Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997). This theoretical framework assumes that individualistic values (e.g., autonomy, independence, and personal freedom) are prevalent in most Western societies, whereas collectivistic values such as family interdependence, relatedness, and obedience are highly endorsed in East Asian cultures (Yu, 2011). According to this dichotomized cultural framework, parents in societies categorized as collectivistic highly value socialization goals concerning fostering children's obedience and family interdependence, because community interdependence and mutual responsibility are believed to be the key to success. In contrast, parents in Western societies attach higher value to children's characteristics such as autonomy and independence as compared to characteristics relevant to collectivistic values, because these characteristics are considered adaptive and functional in individualistic cultures.

Although this conceptualization of individualism–collectivism has been widely used in psychological and developmental studies, a growing debate exists regarding whether it is an oversimplified portrayal of cultural values and parental socialization goals to lump them together as one or the other (e.g., Kağıtçıbaşı, 2007; Keller, 2012; Oyserman, Koon, & Kimmelmeier, 2002). First, the constructs of collectivism and individualism, as umbrella terms, incorporate multidimensional components (Brewer & Chen, 2007). Oyserman and her colleagues examined 27 instruments assessing

individualism and collectivism, and found that collectivistic and individualistic scales contained eight and six domains of cultural values respectively. Additionally, these values and goals are not necessarily opposites as this dichotomous categorization assumes (Tamis-LeMonda et al., 2007). For example, in terms of attachment theorizing, a secure base (relatedness, a “collectivistic” value) is considered to be necessary for exploration of the world (autonomy, an individualistic value) to occur (Ainsworth, 1989; Bowlby, 1973). Similarly, in Ryan and Deci’s (2008) Social Determination Theory, relatedness and autonomy are two of the three essential components for good human functioning. Further, there is also a methodological limitation of the Individualism–Collectivism dimension. Although both Hofstede (2001) and Triandis (2001) distinguish between society-level and individual-level analyses, as Oyserman et al. noted, it is difficult to know how such a distinction can be reasonably maintained from a methodological point of view.

Kağıtçıbaşı (2007) argued that there are two main orientations—a values orientation and a self-orientation in cultural values and the self. The values orientation is reflected in either hierarchical or egalitarian human relations regarding cultural norms and values, whereas the self-orientation concerns the distance of interpersonal relationships. Corresponding to the two distinct orientations, she proposed an orthogonal theoretical model to explore relations among sociocultural context, parents’ socialization values, and the development of the self (Kağıtçıbaşı, 2005). In this model, the first dimension is labeled as “agency,” reflecting the degree of willful functioning, which extends from autonomy to heteronomy. The interpersonal dimension concerns the

distance between the self and others, reflecting the extent to which the self connects to others and ranging from separateness to relatedness. These dimensions are proposed to be orthogonal (independent) and could be found to be correlated or fit together.

Additionally, Kağıtçıbaşı (2013; Kağıtçıbaşı & Ataca, 2005) pointed out that the values parents attach to different types of socialization goals and the characteristics parents want for their children are profoundly influenced by historical and cultural contexts. By investigating relations between cultural-historical factors and parental goals, we are able to understand why a certain type of parental socialization orientation occurs in a given cultural context and historical period. Based on findings from studies of parents' values for children in nine societies varying in different levels of economic development, Kağıtçıbaşı distinguished three prototypical models of family interaction dynamics, each of which is comprised of different combinations of characteristics parents expect for their children.

The first is the interdependent family model which is characterized by intergenerational interdependence. The interdependence between parents and children is ensured by obedience socialization, which requires children to obey rules and traditions at both family and societal level. Children are expected to make a contribution to the family economy and, when they enter adulthood, take care of their aging parents. It is clear that family members not merely materially but also psychologically depend on each other, and individual autonomy is a threat to family security. Thus heteronomous and relational socialization goals are preferred in this type of family model. This family

model is predominant in less-developed preindustrial rural areas of traditional societies, and feature close-knit family relationships.

The second is the independent family model which is common in affluent and industrialized Western societies. In this type of family model, family members value clear self boundaries between the self and others, and are relatively independent in both psychological and material realms. Therefore, socialization strategies encourage children to be independent, self-reliant, and separated from their parents (Kağıtçıbaşı, 2007). However, there is some evidence suggesting that the independence model may paint an overly broad picture of the so-called “individualistic West,” that is, societies such as the United States (Kağıtçıbaşı, 2013; Suizzo, 2007; Oyserman et al., 2002), as that broad individualistic brush may not adequately reflect the cultural diversity of different racial/ethnic groups found in “Western” societies.

The third type is the psychological interdependence model, a synthesis of the first and the second model. This model is predominant in societies that are experiencing rapid urbanization. These increasing economic developments and societal changes shift people’s life styles and patterns of relationships. Thus self-agency and autonomy are viewed as functional and adaptive but relatedness continues to be highly valued. As the close ties between children and their parents, extended kin, and the community at large do not conflict with the cultivation of self-agency in this model, autonomous and relational socialization goals coexist. Further, children are attached to less for their material value, but for their psychological values. As Kağıtçıbaşı (2013) argued, that because psychological interdependence satisfies the needs of both autonomy and

relatedness, it is more optimal than either the independence or the interdependence family models, and might be increasingly found in the majority world (Kağıtçıbaşı, 2007).

Given that virtuous gratitude involves an autonomous willingness to reciprocate and take others' wishes into consideration, cultures that value both autonomy and relatedness would be more likely to be beneficial to cultivate virtuous gratitude. Parents in cultures that value autonomy and relatedness might emphasize the importance of abilities that could foster their connection with others, self-reliance, and independency. In accordance with parents' socialization orientations, they may adopt parenting practices that might foster children's autonomy and relatedness, such as autonomy granting and warmth, which serve as grounds for the development of virtuous gratitude.

Time

Time, including microtime (i.e., continuity and discontinuity in a proximal process), mesotime (i.e., the frequency of a proximal process within days or weeks), and macrotime (i.e., changes of the society through generations), is also vital in shaping human development (Bronfenbrenner & Morris, 1998, 2006). As discussed in the previous sections, psychological and behavioral changes might accumulate over time through everyday activities in which individuals participate, ultimately leading to development. Considering gratitude, children gradually acquire sociocognitive abilities and experiences regarding gratitude expression through their interactions with parents, teachers, and peers, which should occur frequently and become increasingly complex.

Taking elements from Elder's (1998) life-course theory, Bronfenbrenner suggested that groups experiencing a given historical event during a period of time may

have different developmental outcomes as compared to groups not exposed to this event. Additionally, the developmental impact of a certain event might be distinctive when it occurs in different time period of a person's life. Parental values and practices change over historical time. For example, Kağıtçıbaşı and Ataca (2005) studied three generations of Turkish parents' values for their children. Educated urban Turkish parents value relatedness and autonomy for their children. They want their children to be closely connected to the group they belong to, and at the same time, they want to cultivate a sense of autonomy in their children in order to maximize their success in urban areas. In contrast, the older generation living in the rural areas, which was less affected by the urbanization and less educated, tended to value heteronomy and relatedness.

In sum, the bioecological model provides a relatively comprehensive picture of the mechanism through which different factors work together synergistically to influence the development of gratitude as a moral virtue. This theory highlights the critical role of everyday activities in encouraging the expressions of gratitude among children and adolescents. The types of interactions that are valued and the manner of interactions among people are influenced by individual characteristics (e.g., cognitive abilities), contextual factors (e.g., family context and culture), and events occurring over historical time, which jointly affect the ways in which children express gratitude in different societies.

CHAPTER III

LITERATURE REVIEW

Current Discourses on Gratitude

The topic of gratitude has attracted increasing attention from psychologists and philosophers, who approach gratitude from a variety of perspectives. Positive psychologists (e.g. Froh, Bono, & Emmons, 2010; Froh, Sefick, & Emmons, 2008) have made great contributions to understanding how gratitude as a positive framing tendency fosters health and functioning, and to developing valuable interventions for the cultivation of these grateful feelings to enhance individual wellbeing and flourishing. Social psychologists (e.g., Algoe & Zhaoyang, 2016; Algoe & Stanton, 2012) have focused on the benefits of interpersonal gratitude as an emotion to improve relationship qualities and to foster prosocial behaviors. Developmental psychologists and philosophers (e.g., Carr, 2013, 2015; Tudge, Freitas, & O'Brien, 2015) have approached gratitude as a moral virtue, and sought to clarify how such a term should be used.

Gratitude as a Positive Reframing Tendency or a Life Orientation

Conceptualization. The vast majority of research on gratitude has conceptualized it as a positive reframing tendency of noticing and appreciating the positive in life (Wood, Froh, Geraghty, 2010). This view assumes that gratitude consists of a wide range of behaviors, emotions, and cognitive processes, including feelings of awe when viewing beauty, acknowledging others' kindness, focusing on the positive, and

being grateful for what one has in social comparisons (e.g., Emmons & Stern, 2013; Lambert, Graham, & Fincham, 2009; Watkins, Woodward, Stone, & Kolts, 2003).

Results of empirical studies indicate that gratitude, as a positive reframing tendency is related to purpose in life (e.g., Wood, Joseph, & Maltby, 2009), self-esteem (e.g., Kashdan, Uswatte, & Julian, 2006), positive affect (e.g., Froh, Kashdan, Ozimkowski, & Miller, 2009; Sheldon & Lyubomirsky, 2006), life satisfaction (e.g., Park, Peterson, & Seligman, 2004), and other aspect of wellbeing. Gratitude interventions have been designed and utilized to enhance physical health, promote psychological adjustment, and protect against negative outcomes among different people, including children and adolescents, veterans, school teachers, and older adults (e.g., Chan, 2010; Gordon, Musher-Eizenman, Holub, & Dalrymple, 2004; Kashdan et al., 2006; Li, Zhang, Li, Li, & Ye, 2012).

Although empirical studies on the basis of the positive-reframing view resulted in some intriguing findings, it should be noted that this conceptualization of gratitude is broad and coarse-grained, because it contains various components of well-being, happiness, and appreciation (Tudge, Freitas, & O'Brien, 2015). It lacks the ability to distinguish gratitude and appreciation. As Roberts (2004) noted, "...if we are going to have a science of something, we had better have a pretty clear idea what that thing is and be careful not to confuse it with other things that may be a little bit like it" (p. 65).

It is accurate to conceptualize the dispositional tendency of acknowledging the value of an object or a person, and feeling positive towards life as appreciation (Fagley, 2016; Fagley & Adler, 2012). According to Fagley and colleagues, gratitude is an

important aspect of appreciation, but is not equal to appreciation. According to them, gratitude refers to noticing a received benefit, and feeling grateful toward the benefactor. It inherently involves a person who has done or given something good, and the beneficiary who receive benefits from the person (Emmons & Crumpler, 2000). Fagley et al. maintain that gratitude and appreciation are better to be understood as two distinct concepts, considering that the former is an “essentially social emotion of a specific attitudinal relationship to a benefactor” (p. 501), whereas “the later is the habitual focusing on and appreciation of life’s positive benefits” (p. 501).

Further, the encouragement of the positive reframing tendency may lead to the misplacement of gratitude and result in social injustice (Car, 2016; McConnell, 2016). For example, if slaves focused on the good things (e.g., they were provided food and shelter) and were grateful for what they have, they would feel happier; however, desirable social changes might occur slowly if at all. It is inappropriate if a wife expresses gratitude to her partner for not punching her. Gratitude is misplaced if gratefulness is expressed for deeds without good intentions. In this sense, the encouragement of excessive gratitude and reframing negative outcomes as positive ones does harm to individual wellbeing as well as social justice (Morgan, Gulliford, & Carr, 2015). Thus, for teachers and educators, a key point is to teach individuals when, where, and how they should feel and express gratitude, but not to encourage them to ignore the negative and to express gratitude in any circumstances in which they can appreciate some sort of positive benefit.

Operationalization. On the basis of conceptualizing gratitude as a positive reframing tendency or dispositional gratitude, scales such as the multifactorial Gratitude, Appreciation, and Resentment Test (GRAT; Watkins et al., 2003), and the Gratitude Questionnaire-6 (GQ-6; McCullough, Emmons, & Tsang, 2002) have been developed and widely used to quantify individual differences in dispositional gratitude.

The GRAT (Watkins et al., 2003) was developed to tap characteristics of grateful individuals. According to Watkins and colleagues, grateful individuals acknowledge and appreciate others' contributions to their wellbeing, have a positive reframing tendency, and recognize and feel grateful for their blessings. Accordingly, four factors compose the GRAT scale, which are "Simple Appreciation" (for example, "every Fall I really enjoy watching the leaves changing colors"), "Appreciation of Others" (for example, "I couldn't have gotten where I am today without the help of many people"), "Sense of Abundance" (for example, "for some reason, I never seem to get the breaks that others get" [reversed coded]), and "Importance of Gratitude Expression" (for example, "although I think it's important to feel good about your accomplishments, I think it's also important to remember how others have contributed to my accomplishments"). Individuals indicate the extent to which they agree to these statements with a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). However, results of the factor analysis suggested that items belong to "Appreciation of Others" and to the "Importance of Expressing Gratitude" clustered together, resulting in a three-factor scale. This scale has been validated in different cultures, such as the United States (e.g.,

Diessner & Lewis, 2007) and China (e.g., Lin & Huang, 2016; Liu, Gong, Gao, & Zhou, 2017).

Another measure that has been developed to assess gratitude as a positive reframing tendency is the GQ-6 (McCullough et al., 2002). McCullough and colleagues assume that dispositionally grateful people feel gratitude more intensely, more frequently, to more people, and across more situations. Based on this notion, a total of 39 positively and negatively worded items were constructed to measure gratitude intensity, frequency, density, and span facet. Sample items are “I feel thankful for what I have received in life,” and “I sometimes feel grateful for the smallest things.” Individuals report whether they agree with these statements on a 7-point Likert scale (1 = strongly disagree, to 7 = strongly agree). Results showed that these items were not factorially distinct, but rather reflected a single construct. The final scale consists of six items. The GQ-6 scale has been validated with samples from different societies/cultures, such as China (e.g., Chen, Chen, Kee, & Tsai, 2009; Li et al., 2012), the United States (e.g., Wood, Maltby, Stewart, & Joseph, 2008), Japan (e.g., Naito & Sakata, 2010), Netherland (e.g., Kubacka, Finkenauer, Rusbult, & Keijsers, 2011), and Philippines (e.g., Datu & Mateo, 2015).

As noted, items in these scales measure aspects that are related to appreciation, such as enjoying the beauty of nature and feeling grateful for a simple pleasure (Fagley, 2016; Tudge, Freitas, & O’Brien, 2015). Although these measures emphasize the importance of expressing gratitude towards others (e.g., positive responses to receiving benefits), they fail to assess aspects of virtuous gratitude, such as the recognition of the benefactor’s intentionality and the beneficiary’s autonomous repayment behaviors

(Merçon-Vargas, 2017). The operational ambiguity roots in the conceptualization of gratitude as a positive reframing tendency, which uses the terms appreciation and gratitude interchangeably.

Moreover, Renshaw and Steeves's (2016) meta-analysis showed that the gratitude measures (e.g., the GRAT and the GQ-6) have poor test-retest reliability, and have questionable concurrent validity with each other. These results indicate that measures assessing dispositional gratitude plausibly reflect related but distinct constructs. Notably, the correlations between gratitude and other constructs (e.g., life satisfaction and social integration) are far higher than the correlations between different gratitude measures.

Gratitude as a Positive Emotion

Conceptualization. Some social psychologists take a social evolutionary perspective, which integrates theories on positive emotions (Fredrickson, 2001) and interpersonal relationships (Reis, Clark, & Holmes, 2004) to propose that gratitude functions to promote relationship quality and prosociality (e.g., Algoe, 2012; Algoe & Haidt, 2009). They define gratitude as an affect that flows from the perception that one receives benefits from the costly, intentional, and voluntary action of a benefactor (Algoe, Gable, & Maisel, 2010; Algoe, Haidt, & Gable, 2008; McCullough, Kilpatrick, Emmons, & Larson, 2001). The social evolutionary view of gratitude proposes that feeling and expressing gratitude extends beneficiaries' attention to a third party, and promote both benefactors' and beneficiaries' prosocial behaviors (McCullough, Kimeldorf, & Cohen, 2008).

This approach is an improvement on the “positive reframing tendency” approach in that scholars taking this approach define gratitude as being an inter-person construct, which emphasizes that emotion gratitude is triggered by benefits received. However, conceptualizing gratitude as a positive emotion does not emphasize the target of gratefulness, making it difficult to differentiate gratitude from other types of positive emotions. Receiving a benefit is fraught with a widely diverging assortment of feelings and emotions (Shelton, 2004). These feelings either being elicited by the benefit being given to the recipient, or by the kindness of the benefactor. The former could be considered as happiness, which towards the benefits, whereas the later might be a mix of indebtedness and gratefulness, which targets the benefactor. Therefore, the conceptualization of gratitude as a positive emotion triggered by benefit received is insufficient to capture the moral quality of gratitude (Shelton, 2004), because it does not specify the target of gratitude.

Operationalization. Researchers who take this view of gratitude operationalize this concept through experiments, in which grateful emotional state is created and relations between gratitude and some outcomes (e.g., relationship quality and prosocial behaviors towards a benefactor or a third party) are examined. There are three types of experimental operationalization: (1) individuals are asked to recall moments in which people who have helped them or given them something nice (e.g., Algoe & Stanton, 2012), or moments in which they witnessed someone being particularly generous to others (e.g., Algoe & Hadit, 2009); (2) individuals are instructed to write a letter to express their thankfulness to a benefactor for the help received or a gift given (e.g.,

Algoe, Fredrickson, & Gable, 2013; Seligman, Steen, Park, & Peterson, 2005); (3) grateful emotions are manipulated in economic games (e.g., DeSteno, Bartlett, Baumann, Williams, & Dickens, 2010).

Findings of experimental studies on the positive role of emotion gratitude in prosocial behaviors and wellbeing are inconsistent, and the interpretations of these results are overly optimistic (Wood, 2014). For example, Ma, Tunney, and Ferguson (2017) examined the overall strength of the relations between gratitude and prosociality based on 91 studies across 65 papers. Results revealed that gratitude is moderately associated with prosociality ($r = .374$). Specifically, this association was significantly larger in studies conceptualizing gratitude as an affective state than studies viewing gratitude as a positive reframing tendency. Among studies that assessed gratitude as an emotion, studies that manipulated grateful emotions in economic games had larger effect size than did studies using recalled moments when the participant felt grateful.

Regarding the relation between gratitude as a positive emotion and individual wellbeing, findings from two meta-analyses indicated that gratitude-based interventions were generally ineffective (Renshaw & Steeves, 2016), as they may operate primarily through placebo effects (Davis et al., 2016). When the participants were involved in the gratitude interventions (e.g., writing gratitude letters, recalling grateful moments), they expected that these activities might lead to some positive outcomes (Wampold, Minami, Tierney, Baskin, & Bhati, 2005). It is their expectations but not gratitude interventions that promote wellbeing (Lyubomirsky & Layous, 2013). Additionally, culture and context could moderate the relation between emotion gratitude and individual wellbeing.

Layous, Lee, Choi, and Lyubomirsky (2013) found that expressing gratitude toward a benefactor (i.e., writing a letter to someone to whom the participant felt grateful) did not work equally well in promoting individual wellbeing across the North American and the South Korean samples. The South Korean participants benefited significantly less in gratitude expression interventions than did North Americans. This may be due to the differences in cultural traditions and philosophy, as South Korean participants felt indebtedness and guilty along with grateful.

Gratitude as a Virtue

Conceptualization. As discussed in the previous chapter, gratitude possesses all the hallmarks of moral virtue. Virtuous gratitude can be defined as a persisting and reliable disposition to appropriately show sincere appreciation for favors or gifts given (Carr, Morgan, Gulliford, 2015; Tudge, Freitas, & O'Brien, 2015). According to Tudge and colleagues, three features characterize gratitude as a moral virtue: (1) the beneficiary must recognize the benefit provided by a benefactor, (2) the benefit itself is freely and intentionally provided to the beneficiary, and (3) the beneficiary autonomously repays the benefactor with something that the benefactor needs or wants, if an appropriate opportunity is available. On the basis of viewing gratitude as a moral virtue, it is clear that gratitude is inherently prosocial and promotive of interpersonal connections.

Conceptualizing gratitude as an emotion or positive reframing tendency involves terminological confusion, whereas conceptualizing gratitude as a virtue is sufficient to capture the nature and moral quality of gratitude. Moreover, viewing gratitude as a virtue is helpful to examine the developmental trajectories of gratitude, as well as to provide

implications for promotion of children's positive development. As moral virtues reflect cultural values of different cultural groups, viewing gratitude as a moral virtue provides a way for social scientists to investigate cultural variations in moral development.

Operationalization. Open-ended questions are most frequently used to measure the development of gratitude as a virtue. Baumgarten-Tramer (1938) was the first who examined the age difference in children's and adolescents' expression of gratitude. By asking Swiss children (from 7 to 15 years old) two questions ("What is your greatest wish" and "What would you do for the person who granted you this wish"), she found that there are four different types of gratitude that vary in complexity in children and adolescents. These four types are verbal gratitude (e.g., "I would thank him"), concrete gratitude (e.g., "I would give him my favorite Lego"), connective gratitude (e.g., "I would help him when he needs help"), and "finalistic" gratitude (e.g., being an excellent student in return for a scholarship to a good university). Baumgarten-Tramer found that verbal gratitude did not vary greatly with age. Concrete gratitude was frequently observed in 8-year-old children. Connective gratitude occurred most frequently in children from 11 years onwards. Finalistic gratitude was rarely found, and only in 15-year-old adolescents.

Baumgarten-Tramer's (1938) approach is a useful way to understand the development of gratitude as a virtue by asking participants how they would repay someone who gives them things or offers help that is meaningful to them. Participants' expressions of gratitude reflect whether they are able to repay their benefactors with something that their benefactors need (connective gratitude) or repay their benefactors

with something that is liked by themselves (concrete gratitude). Therefore, by examining children's and adolescents' expressions of gratitude, researchers are able to know to what extent that children understand their benefactors' intentionality, and to what extent they internalized moral standards and acquire the virtue of gratitude.

An alternative approach, although also using open-ended questions, is to study the development of virtuous gratitude is using vignettes (Freitas, Silveira, & Pieta, 2009; Rava & Freitas, 2013), which assess participants' feelings toward the benefactor and the beneficiary, and participants' perceptions of the relationship between the benefactor and the beneficiary in the story. In Freitas and colleagues' approach, one vignette involves a child who lost a cat and the child's aunt stops baking her cake and helps the child find the cat. A second vignette is about two children who are classmates. In this vignette, a child feels cold, and the second child who is new in the class lent it to the first child. A week later, the second child needs a pair of scissors, and the first child has an extra pair of scissors.

After telling the stories to the participants, individually, and making sure that they understand the story, the experimenter asks them how the beneficiary in the story feels about the benefactor, and whether the beneficiary should help the benefactor when he/she needs help. These questions assess whether or not the participants think repaying a favor is an obligation, and to understand the reasoning processes underlying the participants' behind their views. This approach permits researchers to examine age-related differences in participants' understanding of gratitude and moral judgment. For example, in Rava's and Freitas's (2013) study, most of the children valued the benefactor's helping behavior.

However, only the older children justified that the repayment of the original favor is morally good and should be done autonomously. By contrast, the younger children focused either on the negative consequences not helping would have on the benefactor (e.g., the aunt would be sad) or for the original beneficiary (e.g., the aunt would not like the child and would not help the child again) if the beneficiary did not repay the favor to the benefactor.

Another set of vignettes designed by Morgan and Gulliford (2017) aim to measure how the experience of gratitude is influenced by various factors. These factors include whether gratitude increases in the situation that requires the person at greater risk relative to someone taking a lesser risk, and whether gratitude increases in the circumstance in which the benefactor goes above and beyond his/her duty, and whether gratitude will be triggered by benefits that do not cost any effort on the part of a benefactor. Participants are first asked to imagine themselves in the baseline scenario, and then report their levels of gratitude in this situation on a 0 (not at all grateful) to 100 (the most grateful I could feel) scale. Then vignettes similar to the baseline scenario but differing in different conditions (e.g., whether the benefactor goes above and beyond his/her duty to help the beneficiary) are presented to the participants. After reading these vignettes, the participants complete the same scale measuring levels of gratitude they feel in each scenario.

The Development of Virtuous Gratitude

Gratitude matures along with the socioemotional and cognitive development in children. As a moral virtue, gratitude requires individuals to understand the intentionality

and motivations of the benefactor, and generate appropriate responses towards the benefactor in different situations. These processes demand different types of cognitive abilities and emotional knowledge. When children are young, they do not possess the cognitive abilities, emotional knowledge as well as experiences that are necessary to understand and express gratitude in way that adults do. Thus, children and adolescents are merely able to express a limited version of gratitude.

Empirical studies on the development of gratitude among young children revealed that preschoolers are capable of understanding some features of situations that elicit gratitude. Using vignettes developed by Freitas and colleagues (2009; Rava & Freitas, 2013), Nelson and colleagues (2013) examined developmental precursors to preschoolers' understanding of gratitude, which was measured by two vignettes presented with dolls. In these stories, one character (the benefactor) helps another (the beneficiary), and then needs assistance with something. Children were asked how the first and second character feel, and whether the second character should help the first character. Results showed that most of the 5-year-olds had a beginning understanding of gratitude, which was predicted by emotion knowledge at age 3 and mental-state knowledge at age 4. Specifically, the children who were more capable of understanding others' emotion and mental states had a better understanding of gratitude. In this study, most of the preschoolers did not achieve a complete understanding of virtuous gratitude, as most of them associated a positive emotion with receiving benefits rather than linking positive feelings to the benefactor. When children were asked whether the beneficiary should help the benefactor, fewer than 20% of children reported that the beneficiary should help

the benefactor because the latter has helped the former. Most children focused on the possible negative consequences. Becker and Smenner (1986) found that preschool-aged children were more likely to spontaneously say “thank you” to adults than to peers. These results indicated that preschoolers are at the stage of moral heteronomy.

Using Baumgarten-Tramer’s (1938) approach, Freitas and colleagues (2011) investigated age-related differences in expressions of gratitude among 7- to 14-year-old Brazilian children and adolescents. Results showed connective gratitude was more likely to be expressed with age, whereas older children were less likely to express concrete gratitude. Consistent with Baumgarten-Tramer’s (1938) study, verbal gratitude did not vary significantly across age. Tudge, Freitas, Mokrova, Wang, and O’Brien (2015) replicated Freitas and colleagues’ research in North American children and adolescents. They also found that North American children’s expressions of verbal gratitude were relatively stable across age. Younger children were more likely to express concrete gratitude, whereas adolescents were more likely to express connective gratitude. Payir, Zeytinoglu, and Palhares (2017) used the same approach and examined gratitude development among 7- to 13-year-old Turkish youth. The relations between expressions of gratitude and age among Turkish children and adolescents were similar to what have been found among North American and Brazilian youth. The existing research has suggested that children in different cultures have similar pattern of gratitude expression. That is, younger children are more likely to express concrete gratitude and less likely to express connective gratitude as compared to older children.

Previous studies on children's expressions of gratitude in different societies have provided valuable insight for understanding cultural variations in the development of gratitude. However, the development of gratitude in different societies needs further empirical examinations because little is known about gratitude development in Chinese culture. Using Baumgarten-Tramer's (1938) open-ended questions, Wang, Wang, and Tudge (2015) found that similar patterns of expressions of connective gratitude were expressed by Chinese children and adolescents, with older children being more likely to express connective gratitude. However, verbal gratitude decreased with age, whereas concrete gratitude remains stable across age in Chinese children. They also compared the expressions of gratitude among Chinese youth with those among North American youth. Results indicated that Chinese children were more likely to express connective gratitude than were their North American counterparts.

Wang and colleagues' (2015) Chinese sample came from a relatively poor neighborhood in a large Chinese city; thus, efforts to further study gratitude development with a socioeconomically diverse sample in China are necessary to contribute to better understanding how gratitude is formed in understudied contexts. Moreover, given that the Chinese results reported by Wang et al. were strikingly different from the results in Switzerland, the U. S., and Brazil, it would be helpful to replicate the study with another Chinese sample. Further, as parents' educational levels have critical influences on their child-rearing strategies (which in turn significantly impact children's expressions of gratitude), the examination of the role of educational levels in gratitude expression will shed light on the understanding of gratitude development among Chinese children.

Relations between Parental Values for Their Children and Expressions of Gratitude in Children and Adolescents

Informed by Tudge's (2008) cultural-ecological theory and Bronfenbrenner's (Bronfenbrenner & Morris, 1998, 2006) bioecological theory, the context and social settings where everyday interactions occur between children and their parents, teachers, and peers significantly influence the development of virtuous gratitude. Cultural values are reflected the ways in which children are socialized and educated, and what traits and dispositions of children are likely to be cultivated by parents in order to help their children adequately function in the society. In this sense, moral virtues are reflections of a cultural group's desirable values and socialization goals of a cultural group, because they relate to character traits that members of the cultural group highly value. Gratitude, as a virtue, has been valued in many cultures. Given that virtuous gratitude necessarily involves thinking and acting autonomously, and perspective taking, cultures that attach high value to autonomy and relatedness are more likely to promote connective gratitude.

Previous studies have provided evidence for the potential cultural differences in children's development of gratitude. Wang and colleagues (2015) found that, as compared with children in the United States, Chinese children were more likely to express connective gratitude, which is considered the most sophisticated type of gratitude as the benefactor's feelings and wishes are taken into account by the beneficiary. Differences in expressions of gratitude between Chinese and North American children is possibly due to distinct parental values and socialization orientations in these two countries.

As discussed in previous sections, according to Kağıtçıbaşı (2007), parents' attitudes toward autonomy and relatedness are reflections of cultural traditions and ongoing societal changes, and there is vast heterogeneity in the extent to which a particular society endorses these cultural attitudes (e.g., some cultures value autonomy, some value relatedness, and some are a blend of both to diverse degrees). Among societies experiencing rapid urbanization (e.g., China), shifts in people's lifestyles and patterns of relationships can be found. Whereas such societies might have more traditionally preferred relational values over autonomous ones, increasing economic developments and societal changes (e.g., increased job opportunities in factories, spread of higher education) have contributed to a greater coexistence of autonomous and relational socialization goals. Thus, both autonomous and relational socialization goals are highly valued. As such, self-agency and autonomy can be viewed as functional and adaptive, and the close ties between children and their parents, extended kin, and the community at large do not necessarily conflict with the cultivation of self-agency.

In China, urbanization, economic development, and the spread of higher education have led to changes in people's attitudes toward independence and autonomy. In these shifting environments, blind obedience and relational harmony are no longer adaptive, and characteristics that could facilitate achievement of personal goals have become increasingly important (Chen & Li, 2012). For instance, research has shown that Chinese parents who perceived more social changes were more likely to promote a strong sense of agency in their children, and help their children feel that they can choose and initiate their own actions in order to cultivate children's self-reliance, as compared with

parents who perceived fewer changes (Chen, Bian, Xin, Wang, & Silbereisen, 2010). Moreover, schools in urban areas have recently begun to emphasize the importance of innovation and to encourage students to engage in exploratory activities, which may create a more favorable environment for urban parents to adopt values related to self-agency, initiative, and support for autonomy. At the same time, relatedness is also highly valued by urban Chinese parents. Liu and colleagues (2005) observed urban Chinese mothers' and Canadian mothers' socialization behaviors, and found that Chinese mothers were relatively more directed to encourage relatedness than were Canadian mothers. Similarly, Keller and colleagues (2006) found that, compared to parents from other societies experiencing rapid urbanizing (e.g., India, Mexico, and Costa Rica), Chinese parents in metropolitan cities scored higher on relational-parenting ethnotheories.

In contrast, the United States has been described by Kağıtçıbaşı (2007) as fitting into the independent family model, in which parents attach high levels of importance to autonomous and separate socialization goals. For example, results of Choi's (1992) study of cultural differences in parenting practices showed that North American parents intentionally attempt to detach themselves from their child as compared to Korean parents. Regarding autonomy supporting, North American parents were more likely to encourage their children to engage in autonomous behaviors than were Chinese parents (Liu et al., 2005).

However, empirical evidence regarding the influences that parental values have on gratitude is limited. A study by Merçon-Vargas (2017) conducted in the United States and Brazil is an important first step to understand what parents value for their children

and its relation to gratitude development. Merçon-Vargas examined relations between parental values concerning relatedness, autonomy, separation, and heteronomy and children's expressions of verbal, concrete, and connective gratitude among Brazilian and North American families. Results showed that parental value of heteronomy was related to children's expressions of verbal gratitude among Hispanic American and Brazilians, highlighting a potential link between following social norms and verbally expressing gratitude. Considering that Brazilian and Chinese parents value different types of developmental goals for their children are different, the examination of the association between parental value and gratitude in China has great potential to yield insights for the theoretical understanding of the development of gratitude as a virtue in different cultural contexts.

Links between Parenting Practices and the Development of Gratitude

Bronfenbrenner's (Bronfenbrenner & Morris, 1998, 2006) bioecological theory and Tudge's (2008) cultural-ecological theory highlight the critical role of interactions between children and their significant others. Among these significant others, parents might be the most salient ones that influence the children's expressions of gratitude (Hussong et al., 2018).

Parental Role Modeling, Reinforcing, and Parent–child Discussion of Gratitude Expression

There is a growing interest in developing effective and appropriate interventions to promote gratitude in youth and further address character education challenges.

Previous empirical studies provided supporting evidence to the pivotal role that parents

play in children's expression of gratitude (e.g., Hoy, Suldo, Mendez, 2013; Li, 2015; Rothenberg et al., 2016). Bono and Odudu (2016) suggest that several effective strategies could be used to promote gratitude in children and adolescents: (a) promoting purpose in life; (b) acting as role models and reinforcing child grateful expression; (c) establishing high-quality relationships; (d) autonomy granting. Additionally, Hussong and colleagues (in press) maintain that discussions regarding grateful expression would be another important way to foster gratitude in children.

Parents' modeling behavior is a salient way through which children learn potentially consequences and benefits of expressing gratitude (Hussong et al., 2018). Parents may act as children's role models by deliberately expressing gratitude for gifts given or help received to benefactors when children are present (Bono & Odudu, 2016; O'Brien, Liang, Merçon-Vargas, & Price, 2018). Second, reinforcement of grateful expression is another effective strategy parents use to promote gratitude in youth. For example, when children receive benefits from others, they encourage their children to say "thank you," to acknowledge the efforts in benefits received (Froh et al., 2015; Lomas, Froh, Emmons, Mishra, & Bono, 2014; Visser, 2009). After children express gratefulness to their benefactors, parents may reinforce this behavior and provide opportunities for their children to rehearse this behavior in another situation. Third, parents may also cultivate the development of gratitude in children through parent-child conversations about gratitude (Hussong et al., 2018). Reflecting on everyday activities with children, parents may teach their children appropriate attitudes and reactions toward benefits received and benefactors, as well as explain why these responses are necessary.

Through these processes, children will gradually gain understanding of what gratitude is and why gratitude should be expressed in a certain circumstance.

Parenting, Quality of the Parent–Child Relationship, and the Development of Gratitude

There might exist some indirect ways through which parents affect the development of gratitude. For example, parents' parenting practices and their global styles of parenting may foster certain types of sociocognitive abilities (e.g., empathy, perspective taking, and autonomy), which are related to children's expression of connective gratitude. However, there is limited body of studies that examine this mechanism. Therefore, it is important to explore what type of parenting practices or global styles of parenting are beneficial to the development of these sociocognitive abilities as well as the development of virtuous gratitude.

Parenting refers to parental investment in promoting and supporting the development of physical, emotional, and cognitive abilities in their children (Martin, 2000). According the contextual model of parenting (Darling & Steinberg, 1993), parenting could be distinguished between parenting styles and parenting practices. Different types of parenting styles and practices have been demonstrated to result in distinctive developmental outcomes.

Global styles of parenting and the development of gratitude in children.

According to Darling and Steinberg (1993), parenting styles refer to “a constellation of attitudes toward the child that are communicated to the child and that, taken together, create an emotional climate in which the parents' behaviors are expressed” (p. 488). Four

parenting styles have been identified and studied in previous research: authoritative, permissive, authoritarian, and neglectful style (Baumrind, 2013). Different parenting styles involve qualitative differences in parental behaviors, in terms of involvement, warmth, and parental control (Baumrind, 1968).

The authoritative parenting style refers to parenting attributes such as appropriate autonomy and emotional support along with clear and high expectations placed on children. Authoritativeness is considered the most beneficial for children's development, as it is said to foster children's empathy, self-regulation, sense of autonomy, and moral reasoning abilities (Eisenberg, Hofer, Sulik, & Liew, 2014). Authoritative parents are warm, responsive, and frequently offer children feelings of security that promote children's feelings of connectedness to others, as well as lowering their self-oriented concerns (Hoffman, 2000; Steinberg, Lamborn, Dornbusch, & Darling, 1992). Additionally, authoritative parents not only serve as model of supporting and caring others (Grusec & Hastings, 2015), but also deliberately direct their children's attentions to their own and others' emotional states (Malti, Eisenberg, Kim, & Buchmann, 2013). These practices are beneficial for promoting children's empathy and perspective-taking abilities. Further, although authoritative parents are firm and strict, they are not overly intrusive or restrictive. They appropriately grant their children autonomy by involving children in developing rules and discipline strategies, and providing clear and reasonable explanations for conduct (Eisenberg et al., 2015). These positive discipline behaviors play a pivotal role in fostering children's self-regulation and sense of autonomy, as well as in helping children to internalize moral standards. Authoritativeness has been found to

be positively related to children's prosocial behaviors, such as volunteering, helping, sharing, and comforting behaviors (see Pastorelli et al., 2016).

As the authoritative parenting style contributes to the development of empathy, abilities of understanding others' emotions, moral reasoning, and a strong sense of autonomy, one would expect that children with authoritative parents would be more likely to express connective gratitude. Because they are able to understand their benefactors' intentionality and needs, feel connective to their benefactors, and have internalized moral standards to feel obligated to repay their benefactors. Importantly, they freely and wholeheartedly accept this obligation as the strong sense of self-agency enables them to autonomously fulfil those internalized moral values.

Authoritarian parents are similarly demanding as authoritative parents, but they are overly restrictive, intrusive and lack autonomy support. Authoritarian parents' intrusiveness and control may limit the chances for children to make decisions and think for themselves, thus their practices hinder the development of autonomous morality (Bornstein & Bornstein, 2007). Permissive parents are warm and involved, and willing to support their children's autonomy, but they are not demanding and often fail to their children's behaviors. Neglectful parents are simply disengaged and never involve in their children's development (Kerr, Stattin, & Özdemir, 2012). Permissive, authoritarian, and neglectful style of parenting are related to children's negative functions (Milevsky, Schlechter, Netter, & Keehn, 2007; Timpano, Carbonella, Keough, Abramowitz, & Schmidt, 2015). Therefore, it is reasonable to expect that these parenting styles have a detrimental effect on children's development of gratitude.

Parenting practices and gratitude development in children. Parenting practices are domain-specific behaviors aiming to foster particular skills or behaviors of children and adolescents (Darling & Steinberg, 1993; Moilanen, Rasmussen, & Padilla-Walker, 2014; Morris, Cui, & Steinberg, 2013). Three positive parenting practices might be salient predictors of children's expression of connective gratitude: parental warmth, structure provision, and autonomy support. Parental warmth, referring to parents' general tendencies to be supportive, sensitive to children's needs, and to frequently express positive emotion to their children (Zhou et al., 2002), is positively related to children's and adolescents' perspective taking and empathic concerns (Miklikowska, Duriez, Soenens, 2011). Parental structure provision involves conveying clear expectations, providing rationale for rules and standards, and discussing long-term or short-term consequences of obeying or disobeying these rules and standards (Farkas & Grolnick, 2010). Parental structure provision is beneficial for children to learn and accept moral standards, and for fostering their self-regulation and moral reasoning abilities (Farkas & Grolnick, 2010; Speicher, 1992). Parental autonomy support is defined as parents' encouragement of a strong sense of agency in their children, which helps their children feel they can choose and initiate their own actions (Joussemet, Landry, & Koestner, 2008). These parenting practices play an essential role in promoting children's empathy and autonomy, thus they may be salient determinants of children's development of gratitude.

Parenting, the parent-child relationship, and their roles in promoting gratitude development. Authoritative parenting styles, which involves a high level of

parental warmth, responsiveness, autonomy granting, and medium level of parental control, are consistent with the features of high quality of parent–adolescent relationships (Scott, Briskman, Woolgar, Humayun, & O’Connor, 2011). In contrast, permissive, authoritarian, and neglectful style might be related to low quality of parent–child relationship. There is substantial empirical evidence supporting the positive relation between the authoritative parenting style and a high level of parent–child attachment (e.g., Dreyers, 2012; Karavasilis, Doyle, & Markiewicz, 2003). Dreyer’s (2012) research found that, children’s, mothers’ and fathers’ report of authoritative parenting style are positively related to levels of attachment between children and parents, whereas authoritarian parenting style negatively predict parent–child attachment. Regarding the relations between types of attachment and global parenting styles, Karavasilis et al. found that authoritative parenting is positively associated with secure attachment between mothers and children, and there exist a positive relation between neglect parenting style and avoidant attachment.

As suggested by Darling and Steinberg (1993), parenting styles are theoretically independent of specific socialization domains; thus they are contexts that moderate the influences of parenting practices, which are specific behaviors socializing children towards some domain-specific skills. To be specific, parenting styles merely convey to the child the parent’s attitude toward the child; thus the influence that parenting styles have on parent–child relationship and children’s developmental outcomes are manifested through different types of parenting practices. For example, parents responsive to their children’s needs tend to be more child-centered and have positive evaluations of their

children, which foster close relationship and secure attachment with their children (De Wolff & van IJzendoorn, 1997). Additionally, promoting independence (i.e., autonomy granting) in children could promote their respect for parents and appreciation of the supportive relationship (Soenens, Vansteenkiste, & Sierens, 2009), which in turn facilitate the quality of parent–child relationship. Parental warmth and autonomy support have been demonstrated to be positively related to secure attachment with parents (Bosmans, Braet, Leeuwen, & Beyers, 2006), and negatively associated with attachment anxiety and avoidance (Doyle & Markiewicz, 2005).

Authoritative parenting styles which are manifested through positive parenting practices may influence the development of gratitude in two ways. First, authoritative parenting styles and positive parenting practices facilitate the development of empathy, perspective taking, volitional functioning, as well as moral reasoning abilities in children and adolescents. These sociocognitive abilities may be positively related to children's expression of gratitude, because these abilities enable children to understand others' thoughts and feelings, and to freely and autonomously fulfill moral standards they internalized to repay their benefactors. That is, authoritative parents foster the virtue of gratitude through promoting sociocognitive abilities correlated to expression of connective gratitude. Further, authoritative parenting styles facilitate the quality of parent–child relationship. High qualities of parent–child relationship may create a beneficial environment for children to learn and mirror their parents' caring behaviors towards others. A high quality parent–child relationship could also enhance children's acceptance of parental values about respect and care of others (Grusec & Goodnow,

1994). Caring and a sense of connection to others are premises of expression of connective gratitude.

Reciprocal Relations between Parenting and Children's Development of Gratitude

Recent research underscored the reciprocal nature of parenting and the parent–child relationship (Kerr et al., 2012), meaning that both parents and children play active roles in shaping parenting practices and parent–child relationships. There is supporting evidence for the reciprocal relations between positive parenting and prosocial development in children and adolescents (e.g., Carlo, Mestre, Samper, Tur, & Armenta, 2011; Miklikowska et al., 2011; Newton, Laible, Carlo, Steele, & McGinley, 2014; Padilla-Walker, Carlo, Christensen, & Yorgason, 2012). Newton and colleagues examined bidirectional relationships between parental sensitivity and children's prosocial behavior, and found that mothers' supportive parenting when children were age 4.5 predicted children's prosocial behaviors at third grade, which in turn predicted maternal sensitivity when children were at fifth grade. Similar findings were found in adolescence—Carlo et al. and Padilla-Walker et al. reported that adolescent prosocial traits in early adolescence predicted maternal warmth and authoritative parenting in middle adolescence, which are positively related to later adolescent prosocial tendencies. These findings suggest that relations between positive parenting and children's prosocial development are reciprocal in nature and that socialization is an interactive process (Miklikowska et al., 2011).

Linking these research findings to the development of gratitude, one would expect there may exist a reciprocal relation between positive parenting and children's expression

of gratitude. Specifically, some parents try to encourage their children to express gratefulness towards their benefactors as well as foster their empathy, autonomy and moral reasoning. As a result, their children may gradually internalize the moral value of gratitude and acquire abilities enable them to express connective gratitude. Further, children's expression of gratitude toward benefactors and repayment behaviors may enhance their parents' evaluation and acceptance of them, which may foster closeness between parents and children, and finally increase parental warmth and supportive behaviors.

The Effect of Gender on Relations between Parenting and Gratitude Development

As informed by Bronfenbrenner's bioecological theory (Bronfenbrenner & Morris, 1998, 2006), individual characteristics are salient predictors of human development, as person characteristics may consistently influence interactions between individuals. It is possible that fathers and mothers play different roles in influencing children's gratitude development. Additionally, there is ample evidence showing that gender consistently has been associated with variation in children's empathic concerns and perspective taking (Eagly, 2009; Eisenberg, Zhou, & Koller, 2001). Thus one would expect that children's gender might exert an impact on parents' developmental goal and how parents socialize them, and ultimately result in gender differences in trajectories of gratitude development.

The traditional gender-role differences expect mothers and fathers to take different roles in socializing their children. For example, mothers and fathers may play different role in promoting children's sociocognitive abilities. Mothers are found to more

actively engage in providing emotional support and dealing with children's internal world than fathers do, whereas fathers feel more responsible for disciplining children for their better preparation for interaction with the wider society (Costigan & Dokis, 2006a, 2006b; Verschueren & Marcoen, 1999). Empirical studies have shown that maternal and paternal parenting might relate in a specialized and unique way to these components of empathy (Hastings, Miller, & Troxel, 2014; Miklikowska et al., 2011), with mothers contributing more to children's development of emotional concerns and fathers being more important in the development of perspective taking.

Additionally, child's gender may play an active role in shaping fathers' and mothers' parenting behaviors. Specifically, the differences in gender role may lead parents to differentially socialize their daughters and sons (Hastings, Rubin, & DeRose, 2005). A meta-analysis on 172 studies on gender socialization reported that differences were found in parents' encouragement of sex-type activities (Lytton & Romney, 1991). Parents emphasize sex stereotypes in play activities and house chores. Girls are more likely to be assigned to caregiving their siblings, whereas boys are more often assigned jobs outside the houses. Hence, girls have more opportunities to interact with others, and have higher levels of empathy than do boys. It has been demonstrated that from late childhood to middle adolescence, girls show higher levels of empathic concerns than boys, and their levels of empathic concerns remain stable across adolescence, whereas boy show decrease from early to middle adolescence (Van der Graaff et al., 2014). Van der Graaff and colleagues also reported gender differences in the development of perspective taking. Girls' increases in perspective-taking abilities are steeper than boys'

are during adolescence. Therefore, parents' different socializing practices towards daughters and sons result in gender differences in girls' and boys' empathic concerns and perspective taking abilities, which may elicit different trajectories of virtue development.

Furthermore, interactions between parents and children may vary depending on both parents' and children's genders. In this respect, mothers spend relatively more time with daughters and fathers spend more time with their sons (McHale, Crouter, & Whiteman, 2003). McHale and colleagues also found that mothers know relatively more about their daughters than sons. Regarding differences in paternal and maternal socializations towards daughters and sons, Lytton and Romney (1991) found that fathers tend to make greater differences in disciplining daughters and sons than mothers do. Mothers invested more in promoting emotional closeness with their daughters than with their sons (Lamb & Lewis, 2010). Moreover, Miklikowska and colleagues (2011) reported that fathers might be primarily involved in the socialization of cognitive aspects of empathy (i.e., perspective taking) in children, whereas mothers primarily focus on socialization of the affective aspects (i.e., empathic concerns). Specifically, paternal warmth and autonomy support significantly predict both daughters' and sons' perspective taking, and maternal warmth and support are predictive for empathic concerns in daughters only. Additionally, parents' gender may influence children's modeling behaviors and internalization of parental values, with girls being more likely to identify mothers as their role model and boys tending to mirror their fathers' behaviors (Hastings et al., 2005; Maccoby, 2003).

These empirical studies have important implications for understanding fathers' and mothers' different role in children's development of gratitude in the United States and China. Given these findings, girls and boys may follow different trajectories of gratitude development, with girls being more likely to express connective gratitude at an earlier age than boys do, as parents devote more attention to foster girls' empathic concerns and perspective taking. Additionally, mothers might be more important in girls' development of gratitude, because mothers tend to foster closeness toward daughters and have more influence on girls' empathic concerns than fathers do.

Parenting Practices in China

Research findings discussed above were largely based on Western samples. As Tudge (2008) noted, the relation between parenting practices and children's developmental outcomes needs to be understood in a specific cultural niche. Cultural values may influence parents' choices of parenting practices as well as how children view different parenting strategies (Soenens, Vansteenkiste, & Van Petegem, 2015); thereby the effects of different parenting practices on children's development may vary across cultures (Pomerantz & Wang, 2009).

Chinese parenting practices are guided by core values of Confucianism (Xu et al., 2005). Specifically, Confucianism advocates fulfilling social obligations, establishing harmonious interrelationships with others, conforming to norms and rules, and bring honors and reputation to family through individual achievements (Fung, 1983). Chinese parents frequently use the strategies of "Guan" (to govern and to look after, referring to parent's effort of safeguarding children's well-being and maintaining family

interdependence) and “Jiao” (to train and to teach, pertaining to parents’ effort to discipline children and reflecting parents’ expectation of excellence from children) (Chao, 1994) to discipline their children in order to maintain closeness to the children and maximize their children’s well-being. Therefore, less autonomy-supportive parenting (Guan and Jiao) is unlikely to be considered harsh for Chinese children (Wang & Supple, 2012).

Additionally, ideal parents in traditional Chinese culture are supposed to conform to the “strict father and kind mother”, meaning that the father takes charge of strict control and the mother manifests warmth (Chao & Tseng, 2002). Chen et al., (2010) and Chen and colleagues (2000) found that Chinese fathers were more likely to adopt controlling parenting than were mothers during their children’s period of adolescence. One possible reason is that fathers might feel more responsible for disciplining children for their better preparation for interaction with the wider society (Costigan & Dokis, 2006a, 2006b). Fathers’ parenting strategies are critical components of a family dynamic (Huntsinger & Jose, 2009).

Considering the critical influences of parents on the development of gratitude in youth, it is of great importance to examine parenting practices and strategies that effectively foster virtuous gratitude. However, very little research has particularly focused on associations between parenting practices and gratitude as a virtue. In previous literature, several limitations are found that should not be ignored. First, previous studies (e.g., Hoy et al., 2013) viewed gratitude as a positive reframing tendency, and used scales that involve terminological confusion of gratitude and appreciation to quantify individual

variations in gratitude, such as the Gratitude Questionnaire-6 (GQ-6: McCullough et al., 2002), and the multifactorial Gratitude, Appreciation, and Resentment Test (GRAT: Watkins et al., 2003). Second, some studies (e.g., Rothenberg et al., 2016) relied on parents' reports of their own and their children's grateful emotions in different circumstances, thus there might be potential reporter bias. Moreover, participants in these studies were predominately middle-class white families; very little empirical study has investigated the ways in which parents with different racial/ethnic backgrounds promote children's expressions of gratitude. Third, culture has a profound influence on parent-child interactions and how children should be socialized, however, studies examining cultural differences in the way in which parents promote their children's virtuous gratitude in China and the United States are limited.

Thus, the third aim of the present research is to identify strategies and parenting practices that parents use to promote connective gratitude in youth in China and the United States. Specifically, in the present study parents in both societies were asked to talk about their own experiences of gratitude expression, provide strategies and practices they used to promote children's expression of connective gratitude. Parents were also asked how they would react to children's missed opportunities for gratitude. Findings of the present study will provide possible avenues for culturally relevant interventions aimed at teaching and cultivating virtuous gratitude in youth.

Associations between Gratitude, Materialism, and Spending Preferences

Accumulating evidence has suggested that feeling and expressing gratitude contribute to quality interpersonal relationships between a benefactor and a beneficiary

(e.g., Algoe et al., 2008), and promote both the benefactor's and the beneficiary's prosocial tendencies (McCullough et al., 2001; Belk, 2007). The recognition of being helped by someone may generate positive feelings toward the benefactor, which may motivate the beneficiary to autonomously contribute to the benefactor's wellbeing. In this sense, gratitude is driven by intrinsic goals and other-oriented motivations (Froh et al., 2011).

In contrast, materialism comprises values that emphasize the importance of possessions, the fulfillment of some lower-order needs, and status (Belk, 1984; Kasser, 2016). Therefore, aspects of materialism seem to stand in relative conflict with values concerning others' wellbeing. Previous research has suggested that materialism is associated with high level of loneliness (Pieters, 2013), with treating others in selfish ways (Briggs, Landry, & Wood, 2007), and lower empathy (Sheldon & Kasser 1995).

Studies on relations between virtuous gratitude and materialism in children and adolescents have suggested that children's wishes for others' well-being were significantly related to their expressions of connective gratitude, whereas hedonistic wishes were negatively associated with connective gratitude (Tudge et al., 2015; Wang et al., 2015). A positive relation between concrete gratitude and hedonistic wishes has also been found in previous studies (e.g., Freitas et al., 2016).

Regarding spending preferences among children and adolescents, previous research has provided evidence of a positive relation between North American children's gratitude and preferences for donating money to charity, and a negative association between materialism and preferences for giving money to the poor (Kiang et al., 2016).

As suggested by previous empirical and theoretical research, China and the U. S. differ in values regarding interpersonal relationships and independence. Thus, it is possible that associations between spending preferences and gratitude are different among Chinese children. However, very limited research has examined relations among gratitude, materialism, and prosocial spending preferences in Chinese children and adolescents.

To address the gap in previous literature, the forth aim of the present study is to examine relations between child gratitude, materialism (as indicated by wish types), and spending preferences. Specifically, associations between types of gratitude expression and spending preferences will be investigated among the Chinese and the U. S. samples. Further, concurrent relations between gratitude and wish types will be explored among Chinese and the U.S. youth.

Hypotheses

Research Question I: Do Chinese and U. S. Youth Differ in the Way They Express Gratitude to a Hypothetical Benefactor Who Would Grant Their Greatest Wish?

1. After controlling for child age and gender, Chinese youth will express more connective and less concrete gratitude than will North American youth.
2. Chinese youth and North American youth will not differ in their expressions of verbal gratitude.
3. Across societies, older children will be more likely to express connective gratitude, and less likely to express concrete gratitude than will younger children. Children's expressions of verbal gratitude will be stable across different age groups.

Research Question II: How Do Parental Values for their Children Impact Children's Expressions of Gratitude in China and the United States?

1. Relational, autonomous, separate, and heteronomous values will be found in both Chinese and the North American samples.

2. Chinese parents will hold greater relatedness values than do North American parents, whereas North American parents will attach higher values to autonomy and separateness as compared to Chinese parents.

3. In both countries, parents' values of autonomy and relatedness will be positively related to children's expressions of connective gratitude after controlling for child age and gender.

Research Question III: How Do Chinese and North American Parents Promote their Children's Development of Gratitude?

1. Autonomy granting and parental warmth will be identified as effective practices to promote gratitude in children by both Chinese and U. S. parents.

2. Parents promote gratitude by reinforcing children's grateful expressions and acting as role models.

Research Question IV: Are There Any Associations between Children's Expressions of Gratitude and Children's Values, and Prosocial Spending Preferences?

1. In both Chinese and North American youth, children who wish for social wellbeing will be more likely to express connective gratitude.

2. In both Chinese and North American youth, children who have hedonistic wishes will be more likely to express concrete gratitude and less likely to express connective gratitude.

3. In both Chinese and North American youth, children who express connective gratitude will be more likely to spend a larger amount of money on charity.

CHAPTER IV

METHODS

Sampling

The present research is part of a larger project investigating cultural differences in the development of gratitude. This project began in 2014 and recruited over 1,500 children from elementary and middle schools in Brazil, China, Russia, South Korea, Turkey, and the United States. In addition, approximately 10% of the children and one of their parents in Brazil and the United States were also interviewed at home. The inclusion of samples from different societies is specifically beneficial to understand cultural differences in moral and character development in children and adolescents, and to examine whether the developmental trajectories of gratitude are similar in different cultures.

China

Families with a 7- to 14-year-old child were eligible to participate in this study. For the Chinese sample, we recruited participants in Guangxi province, located in the southern region of China. Guangxi is a densely populated region with over 47 million residents. According to the Sixth Chinese Population Census (National Bureau of Statistics of China, 2010), residents in Guangxi primarily consist of Han Chinese (62%). Over 12 ethnic minority groups are also found with the Zhuang (32%), Yao (3%), and Miao (1%) being the most highly represented. Guilin, the city where we collected the

data, is a city with a two-thousand-year history. In 214 BC, due to the construction of the Lingqu Canal, the first canal in the world, the Guilin area became a gateway between central China and the Lingnan region (current Guangdong, Guangxi and part Hunan, Jiangxi). In 111 BC, in the reign of Emperor Wu of the Han Dynasty, the first administration was set up in Guilin, known as Shi An County. It was one of the major economic, political, and cultural centers for southwestern China from Song Dynasty to Qing Dynasty (960 AD – 1911 AD). After the economic reforms of the 21st century, Guilin has become the new developing zone with fine chemical engineering, biological medicine, new materials, environmental protection, and other industries (Xu, 2010).

The United States

The U.S. families were recruited in Greensboro, North Carolina. In Greensboro, there are approximately 285,000 inhabitants. The residents are diverse in terms of their race/ethnicity and socioeconomic backgrounds. Regarding race, 48.4% are European American, 40.6% are African American, and 7.5% are Hispanic or Latino. The majority of the population completed high school (88.4%), and one third of the population had at least a Bachelor's degree (United States Census Bureau, 2010).

The different sociocultural groups within Greensboro have been deeply influenced by early European colonial settlements, the institution of slavery, the doctrine of states' rights, and the legacy of the Confederacy during the American Civil War (Jacobson, 1992). Greensboro is also an important region for education, transportation, and manufacturing. The poverty rate in Greensboro is 19.5%, which is higher than the national average.

Measures

Demographic Information

Parents reported their levels of education, job, working status, gender of the focal child, and primary caregivers of the focal child on parent consent form. In addition, for the U.S. parents, they were asked to provide information about languages they spoke at home, where they and their children were born, as well as their and their children's race/ethnicity.

The Chinese sample consists of 520 families, within which 468 parents provided their demographic information. The Chinese parents who filled in the questionnaires were predominantly female (65% mothers, 35% fathers). The sample is diverse in terms of parents' socioeconomic backgrounds, with 36% of the parents having earned at least a junior college degree (see Table 1). As shown in Table 1, children were 56% female with a mean age of 10.6 years ($SD = 2.09$). The U.S. sample consists of 484 families, recruited from schools in Greensboro, North Carolina, with children aged 7 to 14 years of age ($M = 10.28$ years, $SD = 2.11$; 53.8% female). In the U.S. sample, parents who completed the questionnaires were predominantly female (58.5% mothers, 12.6% fathers, 2.6% different caregivers, 26.0% missing). The educational levels of the U.S. parents are shown in Table 1. The ethnic distribution of the U.S. sample was 21.8% African American, 29.1% European American, 23.1% Hispanic American, 3.6% Bi-racial, and 3.8% "Others." Around 19% of the participants did not provide their ethnic and racial background information.

In the second part of the study, 29 North American and 19 Chinese families were recruited. The U.S. families participating the second part were diverse in terms of their socioeconomic backgrounds: two parents were educated at middle-school level, two parents completed some high school, six parents graduate from high school, eight parents completed some college, seven parents graduated from college, four parents obtained a master graduate degree, and one parent received a doctoral degree. Regarding race, thirteen parents were African American, twelve parents were European American, and four parents identified themselves as Bi-racial or “Other.” For the Chinese sample, one parent graduated from high school, ten parents completed junior college, six obtained a university degree, and two parents obtained a master degree.

Parental Values for Their Children

The Related-Autonomous-Separate-Heteronomous (RASH: Tudge et al., 2015) scale is a 30-item scale, designed to measure parents’ development goals for their children. Parents were asked to rate the importance of each developmental goal for their child when he or she becomes an adult using a 9-point Likert scale (1 = absolutely not important to 9 = supremely important). Higher scores indicate that parents attach more importance to this developmental goal. The RASH scale consists of four subscales: relatedness (e.g., how important is it that your child, when becoming an adult, is concerned about his or her friends’ well-being?), autonomy (e.g., how important is it that your child, when becoming an adult, tries to reach his or her goals without anyone else’s help?), separateness (e.g., how important is it that your child, when becoming an adult,

feels no need to keep in touch with other people?), and heteronomy (e.g., how important is it that your child, when becoming an adult does thing in traditional ways?).

The RASH scale was developed based on Kağıtçıbaşı's (2007) orthogonal model of cultural value. Although Kağıtçıbaşı (2007) has proposed a measure assessing interpersonal distance and agency, it does not address parental values for their children. Additionally, Kağıtçıbaşı's measure has several problems which limit the reliability and validity of her measure. First, each of the orthogonal dimensions (i.e., agency and interpersonal distance) is assumed to lie on a single continuum. In Kağıtçıbaşı's scale, high autonomy is isomorphic with low heteronomy and high relatedness signifies low separateness. One implication is that it is impossible for parents to rate autonomous goals as important as heteronomous goals, depending on the circumstances. However, parents may highly value autonomy in their children, and also want their children to follow society's rules and cultural norms. Further, Kağıtçıbaşı (2007) has suggested that the scores of each subscale reflect degrees of interpersonal distance and agency; however, she used median scores to categorize individuals into one pole or another. Parents in different cultures and societies seem to value relatedness and autonomy at different levels; thus, it is important to assess whether they value each dimension to different degrees. Finally, Kağıtçıbaşı's scale has not been widely used in cross-cultural investigations; therefore, there is little evidence showing that it is a reliable instrument for use in different cultural contexts.

The RASH scale has addressed the limitations of Kağıtçıbaşı's (2007) scale. First, items of the RASH scale were constructed and evaluated by researchers from

Brazil, China, Russia, Turkey, and the U.S.; therefore, the RASH scale captures enough cultural nuances of different societies. As Hofstede and colleagues (2010) suggested, it is necessary to add indicators/items that relevant to local culture and history. Using this approach is important because it is problematic to assume that measurements the work for participants from Western, Educated, Industrialized, Rich, and Democratic societies (WEIRD; Henrich, Heine, & Norenzayan, 2010) equally work for participants from Eastern cultures. Moreover, Tudge and colleagues (2015) have conducted several pilot studies using undergraduate and parent samples to evaluate the RASH scale. Based on the results of these pilot studies, they reworded and edited items that were conceptually confusing.

Children's Wishes

Children's wishes were obtained by the participants' responses to the first question ("What is your greatest wish?") of the Wishes and Gratitude Survey (WAGS; Freitas, Tudge, & McConnell, 2008, adapted from Baumgarten-Tramer, 1938). Children's answers to this question were coded by a trained coder based on the previous work by Freitas et al. (2016) and Wang et al. (2015) as following: (a) hedonism (materialism, monetary, fame, and fantasy/magical wishes), (b) self-oriented wishes (personal well-being, academic, and career wishes), (c) social-oriented wishes (wishes for the family or others' well-being), and (d) "other" (for example, when no response was provided the child said "don't know," or the child wrote that he or she did not wish for anything). Examples of hedonism include "I wish to visit Disney Land" or "I want a toy doll." Answers such as "I want to be a successful engineer in the future" or "I want to go

to college” were coded as a self-oriented wish. Examples of a social-oriented wish include “I wish my parents health and happiness.” Although children were instructed to write in their greatest wish, some children provided more than one wish that could be categorized in more than one wish type.

Each of these three main types of wish was dummy coded (0 = No, 1 = Yes). Another trained coder coded 25% of participants’ answers; the intercoder reliabilities (Kappa) were calculated for each type of wishes as between .90 to 1.00.

Children’s Expressions of Gratitude

Children’s expressions of gratitude were derived from the second question (“What would you do for the person who granted you this wish?”) of the WAGS. For the purpose of this study, the answers to the second question were categorized based on Baumgarten-Tramer (1938): (a) verbal gratitude, (b) concrete gratitude, and (c) connective gratitude, and (d) other. Example of verbal gratitude includes “I would thank him.” Responses coded as concrete gratitude include “I would give her my toy” and “I would give him some money.” Examples of connective gratitude include “I would grant him his wish” and “I would help her get what she wants.” When the child did not understand what the researcher was asking, or did not answer this question, or had wishes that no obvious benefactor could provide, his/her answer to this question was coded as “other.”

Some children expressed more than one type of gratitude. For example, a child wrote he would say “thank you” to the person who granted his wish and that he would help the person when he/she needs help. According to the aforementioned standards, this

child expressed verbal and connective gratitude. All responses were included, and for descriptive purposes, the frequency of responses and percentages of children expressing each type of gratitude will be calculated. As less than 5% of children expressed gratitude in a way that could not be coded (other), I dropped these cases from the following analyses and used verbal, concrete, and connective gratitude as dependent variables.

Children's expressions of gratitude were dummy coded, in which 0 represented that the child did not express a type of gratitude and 1 represented the expression of a type of wish or gratitude. To calculate the reliability, two trained coders independently coded 25% of the data. The intercoder reliabilities (Kappa) ranged from .92 to 1.00.

Child Spending Preferences

Child spending preferences were assessed using the Imaginary Windfall (Tudge & Freitas, 2011, adapted from Kasser, 2005). Children were asked to imagine that they have received \$100 (or equivalent), which were equally split among ten boxes, each containing \$10. They were told that they could spend each \$10 in one of the following four ways: "buy things for yourself (BUY)," "get gifts for friends or family (GIFT)," "give to charity or the poor (POOR)," or "save for future (SAVE)." Children were instructed to mark one of these four options for each \$10. For each option, a child's possible response ranges from 0 (spend no money on the corresponding category) to 10 (prefer to put all money in this category).

Parenting Practices

Parenting practices were obtained by analyzing parents' narratives. A trained interviewer asked parents how they view gratitude, parenting practices, as well as how

they promoted their children's expression of gratitude. Sample questions are the following (for the complete interview protocol see Appendix B):

Thanks for filling out the Parents' Values for their Children (PVC). You think that these three characteristics are the ones that you'd most like to see your child develop. Why did you choose these particular ones? And you listed these three as the ones that you least value. Can you explain why?

I'm particularly interested in your thoughts regarding gratitude. I noticed that in your set of most important values, you circled "gratitude" as _____. Can you explain why? What does gratitude mean to you? [In case gratitude wasn't mentioned before: Is it different from the feeling you described above?] In what situations do you think it is appropriate to feel gratitude? How would you express that gratitude? Is there anything else you might do? Are there situations or occasions in which you might do something different? Why or why not?

In what situations or occasions do you feel it is appropriate for your child to express gratitude and how does he/she typically express that gratitude? Is the response different in other situations or on other occasions? How, or how not?"

In what situations or on what occasions is your child most likely to show gratitude? What does s/he say or do or feel in those situations? Why do you think that s/he does/says that? Do you try to influence him/her in any way?

In what situations or occasions is your child least likely to show gratitude when you think that he/she should? Why do you think that is?

Data Collection Procedures

All measures described above were originally in English, and were translated by a research assistant who is a native Chinese speaker. The Chinese versions were then sent to another researcher, who is a native Chinese speaker and is fluent in English, to make sure the translations are identical in English and Chinese.

The data collection consists of two parts. In the first part of the data collection, eligible families were recruited in public and private schools. All children in target

schools were given a recruitment letter, along with a copy of the parent consent form, demographic questionnaire, and questionnaire regarding parental values to take home to their parents or their primary caregivers. Children with parents who gave permission for their participation then completed questionnaires assessing their gratitude, materialism, as well as other outcomes. Data collection procedures were identical across schools but varied across countries.

For the Chinese sample, participants were recruited from two elementary and two middle schools in three different school districts, which were selected in order to capture the city's socioeconomic diversity. Fliers and consent documents were distributed after parent-teacher conferences. Consent documents informed parents that they would be providing their demographic information, and completing a questionnaire regarding their parental values. During school time, copies of the child assent and questionnaires (i.e., the WAGS and Imaginary Windfall) were given to children whose parents granted permission for them to participate. After children provided their own assent, a trained research assistant administered the set of questionnaires in the children's classroom. The research assistant provided explanations to participants who needed help with understanding instructions of questionnaires, addressed participants' concerns about the study, and ensured that participants were not disturbed by others. For parents who returned the consent form in the schools where we collected data, a research assistant provided a workshop on parenting and how to promote gratitude in children and adolescents.

In the United States, parents received parent consent forms from their children's home room teachers and completed questionnaires at home. For each returned parent consent form, children's home room teachers received a \$2 gift certificate for classroom supplies regardless of whether parents agreed to participate or not. Children whose parents had agreed that they could participate in the study were asked to give their consent before they completed the questionnaires described above. Data were collected either in children's classroom, or a central location, such as a school cafeteria or library. Research assistants were present to address participants' question and to help the younger children reading the questions. If the younger children were not able to write, the research assistants either wrote their answers for them or asked what they had written and then re-wrote the children's responses.

For the second part of the data collection, Chinese families were recruited through snowballing. In the U.S., we contacted families who had participated in the first part and agreed to participate the second part of the study. During the home visit, parents first completed several questionnaires, measuring their gratitude and materialism, their values for their children, their values, and their racial/ethnic identity (only for the North American parents). Children completed two questionnaires, assessing their future outlook and what they expect for themselves. For each questionnaire, the researcher explained the task to the family members involved. Two research assistants trained in interview techniques worked in teams to interview parents and children in separate spaces. Conversations between interviewers and participants were recorded with their consent and later transcribed. For purposes of the present studies, some parts of the

parents' narratives were used. These parts were about how parents promoted their children's expression of gratitude in their everyday lives. These parts were used because the forth research question is interested in parenting practices and strategies that parents adopted to foster children's development of gratitude in different cultures.

Data Analytic Strategies

Descriptive statistics were estimated using SPSS (Version 20). Mplus (Version 7.4) (Muthén & Muthén, 1998-2015) were used to run the preliminary analyses and to test the hypotheses. For the first research question, logistic regression was used to investigate cultural and age-related differences in children's expressions of gratitude. For the second research question, factorial analyses and measurement invariance were used to test the overall quality of the RASH scale, and whether it is equivalent across Chinese and the U.S. parents. Further, logistic regression was used to examine relations between parental values for their children and types of gratitude. For the third research question, I analyzed parents' narratives regarding how they fostered their children's expressions of gratitude towards benefactors, and investigated cultural differences in the association between parental practices and children's development of gratitude in China and the United States. For the last research question, multinomial regression and linear regression were used to explore associations between child of gratitude expression, child materialism and child spending preferences. A full information maximum likelihood estimation procedure (FIML) was used to deal with missing data.

Research Question I

Logistic regression. Binomial regression was used in Mplus (Version 7.4) (Muthén & Muthén, 1998-2015) to test the cultural and age-related differences in children's expressions of gratitude. In this set of analyses, each type of gratitude was used as a categorical dependent variable, and age, society, and the interaction term of age and society were entered as predictors (controlling for gender). Significant interaction terms were tested in separate analyses (Preacher, Curran, & Bauer, 2006).

Research Question II

Confirmatory factor analysis. Model evaluation was conducted through several tests relevant to the purposes of confirming the four-factor structure of parents' development goals, as well as testing measurement equivalence across the Chinese and North American parents. First, the kurtosis, skewness, means and standard deviation of each item, and internal consistency reliability (Cronbach's alpha coefficients) of each subscale was calculated using SPSS Statistics version 20.0. Then a confirmatory factor analysis (CFA) was performed in Mplus version 7.4 (Muthén & Muthén, 1998-2015) with maximum likelihood to validate the four-factor structure. Maximum likelihood is appropriate for estimating confirmatory factor analysis models in this study because there are more than 5 categories for each item (Rhemtulla, Brosseau-Liard, & Savalei, 2012). I evaluated whether the proposed theoretical model fits the observed data using the following model fit indices: chi-square value, the root mean square error of approximation (RMSEA), comparative fit index (CFI), standardized root mean square residual (SRMR). Models with nonsignificant chi-square values, $CFI > .90$, RMSEA

$< .08$, and SRMR $< .10$ are considered acceptable (Kline, 2011). A list of candidate items for removal then was created based on CFA results of the 30-item model. Items were identified through the examination of modification indices (> 10), factor loadings ($< .32$), and large standardized residual covariance (> 0.2) (Tabachnick, Fidell, & Osterlind, 2001). Using these cut-points and changes in model fit following item removal as guidance, I deleted one item each time. I also focused on the relative size of these indicators to inform choices around item retention and removal, in order to guarantee overall conceptual coverage of each dimension. Missing data points were addressed by using full information maximum likelihood estimation method (FIML).

Measurement invariance. After confirming the fit of the hypothesized 4-factor RASH structure with the sample mixing of Chinese and North American parents, I examined the measurement invariance of the RASH scale across the two societies. First, I tested whether the 4-factor model adequately fit the data in the Chinese and the United States sample separately. Then I used multi-group CFA to sequentially test measurement invariance in configural, metric, scalar, and items' unique variance across the two samples (Brown, 2006). Configural invariance is demonstrated by identical factor structure and patterns of factor loadings across samples. Metric equivalence is established if the model shows good fit when factor loadings are constrained equal across groups. Metric equivalence indicates whether the scale has the same meanings across difference groups. Scalar invariance is defined as occurring when the variances present in the item intercepts are equivalent across groups. The establishment of scalar invariance indicates that there is no systematic bias across groups, and means of each

item are equal between groups. Items' unique variance equivalence is assessment of invariance in items' error variances across samples (Adamsons & Buehler, 2007).

Logistic regression. Based on the results of confirmatory factor analysis and measurement invariance, I further examined relations between parental values for their children and children's expressions of gratitude, by entering parental values as predictors of gratitude expression. In each model, a type of gratitude expression was entered as the dependent variable, and each type of parental values was entered simultaneously in the model as predictors. Child age and gender were used as control variables.

Research Question III

Data from parent interviews were drawn upon to answer the third research question. After creating transcripts from the audio recordings, I first read through the transcripts for several times to get sense of the whole picture of parents' narratives. Then I categorized similar parenting practices, and then explored how parents used these strategies to foster children's expression of gratitude in each cultural group. Finally, I compared Chinese parents' parenting practices with those adopted by the U.S. parents to investigate cultural differences and similarities in practices that parents used to promote the development of gratitude in their children.

Research Question IV

Logistic regression. Logistic regression was used to examine associations between child gratitude and values. Each type of wishes was entered as the dependent variable in three separate models, with types of gratitude as independent variables (controlling for age and gender).

Linear regression. The association between gratitude and child spending preference was tested using linear regression. Controlling for age and gender, types of gratitude were entered the model as predictors, and each type of spending preference (i.e., BUY, GIFT, SAVE, POOR) was used as a dependent variable separately in four different models.

CHAPTER V

RESULTS

Descriptive and Preliminary Analyses

Table 2 includes the frequency and percentage of each type of wishes and gratitude Chinese children and adolescents expressed. The sum of some categories exceeded 100% because some children expressed more than one type of wish or/and gratitude. The majority of Chinese children expressed wishes related to self well-being (66.7%). With regard to expressions of gratitude, the proportion of Chinese children expressing connective gratitude was 69.8%. As shown in Table 3, the majority of North American youth had hedonistic wishes (46.1%). More than one third of the U.S. children expressed connective gratitude, compared with more than two thirds of the Chinese sample.

Table 4 presents descriptives for spending preferences among Chinese and North American children. As shown, the most common spending preference in the imaginary windfall scenario among Chinese and North American youth was to save money for the future. However, Chinese youth preferred to allocate a larger amount of money to charitable giving and to spend less money on buying things for others than did their North American counterparts. Concerning gender differences in spending preferences, Chinese boys preferred to spend less money on buying gifts for others, and to spend more

money on themselves than did Chinese girls. In contrast, North American boys and girls were similar in their spending preferences.

Correlations among key study variables are presented in Table 5. All correlations were in the expected directions and most indicated significant relations between variables of interest. Age was positively related to connective gratitude and negatively associated with concrete gratitude. Children's expressions of connective gratitude were positively related to having social-oriented and self-oriented wishes, and negatively associated with hedonistic wishes; expressions of concrete gratitude were positively related to having hedonistic wishes, and negatively linked to self-oriented wishes. With regard to the association between gratitude and spending preferences, connective gratitude was related to more charitable giving and reduced children's materialism, in terms of buying things for self. The associations between key study variables were small to moderate in magnitude.

Research Question I: Age, Gender, and Society Differences in Expressions of Gratitude

A series of binomial logistic regression analyses was conducted to examine age, gender, and society differences in children's expressions of gratitude. Three types of gratitude were used as dichotomous dependent variables (participants who expressed vs. did not express each type of gratitude) in three separate models. Further, the interaction effects between society, age, and gender were further explored above and beyond main effects of the three indicators.

In terms of society differences in gratitude expressions, I had predicted that Chinese youth would express more connective and less concrete gratitude than would the North American youth. Results showed that Chinese youth were less likely to express verbal [$\chi^2(1) = 4.48, B = -.31, e^B = .74, p < .05$] and concrete gratitude [$\chi^2(1) = 38.59, B = -1.00, e^B = .37, p < .001$] than did their North American counterparts (Table 6). Additionally, consistent with the hypothesis, Chinese children were more likely to express connective gratitude than the U.S. children [$\chi^2(1) = 80.22, B = 1.24, e^B = 3.47, p < .001$]. Furthermore, there were significant interaction effects between society and age in the prediction of verbal [$\chi^2(1) = 7.86, B = -.19, e^B = .82, p < .01$] and concrete [$\chi^2(1) = 7.75, B = .22, e^B = 1.24, p < .01$] gratitude.

To further explore the interaction effects between age and society, logistic regression analyses were conducted separately for the Chinese and the U.S. sample. As shown in Table 7, for the Chinese sample, age significantly predicted connective gratitude, indicating that older children were more likely than younger ones to express connective gratitude [$\chi^2(1) = 14.28, B = .17, e^B = 1.19, p < .001$]. However, there were no age-related differences in verbal and concrete gratitude. That is, the probability of expressing verbal and concrete gratitude remained stable across ages. In addition, results showed that gender did not emerge as a significant predictor of any type of gratitude.

For the U.S. sample, age had significant effects on all three types of gratitude. Older U.S. youth were more likely than their younger counterparts to express connective gratitude [$\chi^2(1) = 18.76, B = .22, e^B = 1.24, p < .001$]; they also were more likely to express verbal gratitude [$\chi^2(1) = 4.37, B = .11, e^B = 1.11, p < .05$], and less likely to

express concrete gratitude than did the younger ones [$\chi^2(1) = 17.03, B = -.21, e^B = .81, p < .001$]. Also, as a general trend, North American girls were more likely to express verbal gratitude [$\chi^2(1) = 3.43, B = .39, e^B = 1.48, p = .06$] and less likely to express concrete gratitude [$\chi^2(1) = 3.09, B = -.37, e^B = .69, p = .07$] than did North American boys.

Consistent with what had been expected, age had a significant main effect on concrete and connective gratitude (Table 7). Specifically, older children were more likely to express connective gratitude [$\chi^2(1) = 3772, B = .19, e^B = 1.21, p < .001$], and were less likely to express concrete gratitude than were the younger ones [$\chi^2(1) = 9.59, B = -.12, e^B = 0.89, p < .001$]. Additionally, a gender differences in the expressions of verbal gratitude has been found. As compared with boys, girls were 1.4 times more likely to express verbal gratitude [$\chi^2(1) = 5.37, B = .34, e^B = 1.40, p < .05$].

Research Question II: Relations between Parents' Value for their Children and Children's Expressions of Gratitude

Confirmatory Factory Analyses

Table 8 presents the means, standard deviations, skewness, and kurtosis of each item of the RASH scale. Kurtosis values range from a -2 to infinity. A positive value of kurtosis represents a leptokurtic distribution, and a negative value of kurtosis represents a platykurtic distribution. Values of skewness typically range from 1 and -1. A value of zero represents normal distribution (Kline, 2005). As shown in Table 8, item #30 (conducts his or her life in accordance with his or her own convictions) and item #13 (chooses his or her own goals) were negatively skewed and leptokurtic, suggesting that,

on average, parents attached relatively high value to these two goals. Given that slightly skewed and leptokurtic data will not bias the results, the data were used to test hypotheses without transformation.

Guided by the standards noted in the method section, thirteen items were deleted. These items either had a low factor loading on a dimension to which they were supposed to belong, or most of their variance was explained by another latent factor. After deleting these items, the overall model fit was acceptable with CFI = .95 ($> .90$), RMSEA = .04 ($< .08$, with a 90% confidence interval ranging from .04 to .05), and SRMR = .04 ($< .10$). The value of chi-square (270.58, $df = 103$, $p < .001$) was significant which might result from the large sample size ($N = 832$). Factor loadings and standard errors of each item are shown in Table 9. For the overall model, latent variables were significantly correlated with each other ($p < .001$), except separateness and relatedness ($r = -.003$, $p = .96$). Autonomy was positively associated with heteronomy ($r = .61$, $p < .001$), with relatedness ($r = .30$, $p < .001$), and with separateness ($r = .55$, $p < .001$). Heteronomy was positively related to separateness ($r = .59$, $p < .001$) and relatedness ($r = .47$, $p < .001$).

Consistent with the hypothesis that relatedness, autonomy, separation, and heteronomy would be found in both Chinese and the North American samples, results indicate that the four-factor model fits the data well in both groups when examined separately. The model fit indices for both Chinese (CFI = .93, RMSEA = .05, SRMR = .05, $\chi^2 = 210.46$, $p < .001$, $df = 103$) and North American groups (CFI = .95, RMSEA

= .05, SRMR = .05, $\chi^2 = 186.51$, $p < .001$, $df = 103$) are acceptable, and all factor loadings are higher than .45.

The reliability of the 17-item RASH scale was .80. The reliability for the Relatedness, Autonomy, Separation, and Heteronomy subscale were .80, .61, .68, and .73 respectively. The reliabilities of autonomy and separated subscale were lower than .70, which is considered as a criterion for demonstrating a good internal consistency of an instrument (Nunnally & Berstein, 1994). Considering that Cronbach's alpha is sensitive to the length of the questionnaire (the larger the number of items, the higher the Cronbach's alpha), the low internal consistency of these subscales might be influenced by the fact that the Autonomy and Separation subscales each had only three items.

Measurement Invariance and Population Heterogeneity

I next examined the measurement invariance of the RASH scale across the two societies. Table 10 presents tests of measurement invariance of the RASH latent structure in the two samples of Chinese and U.S. parents. The model fit indices of model 2 versus model 1 indicated that constraining factor loadings did not significantly worsen the model fit ($\Delta\chi^2 = 21.85$, $\Delta df = 13$, $p > .05$). However, the “scalar invariance versus pattern invariance” line (model 3a vs. model 2) indicated that constraining intercepts of indicators across groups worsened model fit ($\Delta\chi^2 = 377.56$, $\Delta df = 13$, $p > .05$). It signifies that at least one mean of an indicator is different across these two nations.

I further tested for equivalence of indicator intercepts. As can be seen in Table 10, when several intercepts were freed (model 3b), the model fit the data equally well as in model 2. To explore why constraining intercepts of indicators degraded model fit, I

freed some intercepts in the U.S. model to improve the overall model fit. Freely estimating some intercepts of the U.S. group improved model fit. Results suggested that intercepts of 10 indicators were not equal across groups. Among the items whose intercepts are not equal across groups, five items belong to the relatedness subscale (i.e., feels close to many people, is concerned about his or her friends' well-being, cares about others' feelings, is loyal to his or her friends, is well connected to the extended family); one belongs to the autonomy subscale (i.e., typically decides on a course of action without help from others); one belongs to the separate subscale (i.e., feels no need to keep in touch with other people); and three items belong to the heteronomy subscale (i.e., does things in traditional ways, obeys people in authority, and avoids doing things that other people say are wrong).

Noninvariant item intercepts point to the existence of indicators' biases. That is parents in different groups with the same value of the underlying goal have a different mean response of the corresponding item. The ten items without invariant intercepts across groups do not have the same latent factor zero point. Therefore, the scale does not have scalar invariance or a strong factorial invariance (Brown, 2006).

For the final test of the measurement invariance, I examined the population heterogeneity, in terms of equal factor variance, equal factor covariance, and equal factor means. As shown in Table 10, constraining variance (model 5 vs. model 4: $\Delta\chi^2 = 14.43$, $\Delta df = 4$, $p > .05$) and covariance (model 6 vs. model 5: $\Delta\chi^2 = 14.35$, $\Delta df = 6$, $p > .05$) were found to be equal across groups significantly worsened model fit as compared to the baseline model. However, constraining means of latent variables to zero significantly

degraded model fit (model 7), suggesting that these two groups differ in their mean levels of the latent factors ($\Delta\chi^2 = 174.62$, $\Delta df = 4$, $p < .001$).

To test the hypothesis that Chinese parents will hold greater relatedness values than do North American parents, whereas North American parents will attach higher values to autonomy and separateness as compared to Chinese parents, I further examine the latent mean differences of these two groups. Consistent with the hypothesis, the means of the heteronomy and autonomy subscales were significantly different between the Chinese (heteronomy: $M = 18.10$; autonomy: $M = 16.86$) and the U.S. (heteronomy: $M = 23.59$; autonomy: $M = 18.85$) sample. However, contrary to what has been predicted, the latent mean of the separation and relatedness scale were not found to be different between the Chinese and the U.S. sample. However, as scalar invariance was not established, the group comparison of latent means is not meaningful in the present study (Brown, 2006).

Associations between Parent Values for their Children and Child Gratitude

Correlations between key study variables are presented in Table 11. For the Chinese sample, heteronomy was positively associated with the expression of connective gratitude ($r = .11$, $p < .05$). Separateness was negatively related to the expression of concrete gratitude ($r = -.10$, $p < .05$). The associations between relatedness, autonomy, and connective gratitude were not significant. For the U.S. sample, the expression of connective gratitude was negatively related to separation ($r = -.14$, $p < .05$, Table 12). For both samples, the associations between relatedness, autonomy, and connective gratitude were not significant.

A series of binomial logistic regression analyses were conducted to examine the links between parent value for their children and children's expressions of gratitude. Three types of gratitude were used as dichotomous dependent variables (participants who expressed vs. did not express each type of gratitude) in three separate models, in which four types of parent values were simultaneously entered as predictors. Further, given that age and gender were significant predictors of children's expressions of gratitude, they were entered as control variables in the models above.

Results did not support the hypothesis that children's expressions of connective gratitude would be positively related to parents' values of autonomy and relatedness. As shown in Table 13, Chinese parents value of separateness negatively predicted children's expression of concrete gratitude, above and beyond the effects of age and gender [$\chi^2(1) = 5.55, B = -.08, e^B = 0.92, p < .05$]. The relations between parents' values for their children and gratitude expression were not found among the North American participants when controlling for child age and gender.

Research Question III: Parenting and Gratitude Development

Thematic analysis of the interviews indicated that strategies that parents used to foster their children's gratitude expression were similar across China and the United States. Consistent with the hypothesis, in socializing gratitude, both Chinese and the U.S. parents promoted the development of gratitude through modeling gratitude expression behaviors and reinforcing their children's expressions of gratitude. Examples include the following:

The U.S. 1044: We--you know are big on saying "Thank you." We're big on writing "Thank you" cards after you get a gift.

China 07: I think parents have more influence than teachers. Although she spends most of her time in school, you know, her teachers primarily focus on her academic achievements. I think she gets more opportunities... [to learn how to appropriately express gratitude] at home. She learns how to express gratefulness from my husband and I, I guess, because she observes how we interact with our friends and my parents-in-law, how we express our gratefulness when we receive help from our friends and families. She learns it from us.

China 11: I believe she learns how to express her thankfulness to me and to others through observation. My daughter and I visit my parents once a week. And I help my parents out with chores. I always tell her why adult children should visit their parents and take care of their parents. I guess she sees how I express my gratitude to my parents and she gradually learns why and how to express gratefulness to people who do a lot of things for her and to people who she loves and for whom she cares.

China 20: I have two sons. When my children do something for me...say, I ask them to hand me a spoon, I always say "thank you." I believe parents are role models for their kids. I want them to have good manners and to be polite to others.

China 02: Um...my daughter learns how to express thankfulness from her teachers, peers, and family. Parents are much more important than friends and teachers in instilling children's good manners. Parents are their children's first teachers and role models.

The U.S. 988: They have a set of Godparents and they gave [child's name] ...they gave him this kind of babyish book. It was the same book that he got last year and he got a homemade pillow. And so it was like he showed he was very "oh, thank you, thank you." And then when it was all over, they left, he said: "mommy it's the same book I got last year." I was like, I know and you handled it so well. It was just what we told him he did an incredible job hiding his disappointment, because you know he got the same book.

China 09: When he says "Thank you," I would say "Well done" to him.

Additionally, having parent–child conversation about gratitude was identified as a strategy that parents used to foster their children’s expressions of gratitude. Examples include the following:

The U.S. 765: We sit down and we have talks about things you should be thankful for, things you shouldn’t. Things that upset her but trying to make her realize that this is why she did it. She wants to help you, not hurt you.

China 06: I often have a one on one discussion with my daughter about my life experience. I told her how I express my gratefulness, when I received help from my friends and family.

Furthermore, cross-cultural differences in strategies were found. Chinese parents emphasized the importance of expressing gratitude to families and relatives and likely encouraged their children to contact them frequently. Examples include the following:

China 07: My parents and my parents-in-law are living very far away from us. Because my husband and I are very busy working, my son doesn’t have many chances to meet them frequently. His grandparents love him unconditionally, they give him a lot of gifts, like toys and food he likes. I make him call them once a week, and thank them for things they’ve done for him. He knows that his grandparents care for him and he should express his sincere gratitude to them and do something for them.

China 03: I believe encouraging my son to interact with our, his families, such as his grandparents, his uncles and aunts may foster his gratitude expression. Kids sometimes are not able to notice that his families do a lot of nice things for him. My parents-in-law came and helped me take care of my son last year. I’m really grateful to them. I encourage my son to Wechat (Skype) his grandparents at least once a week. Because he is too young to do something for adults, his grandparents and families, I guess encouraging him to verbally express his thankfulness and encouraging him to do what he can do to strengthen his relationships with his families are important.

China 05: You know, I run a small hotel, sometimes I have to work at night. My parents and parents-in-law are not able to help me [take care of her daughter]. My sister often helps me take care of my daughter and gives her toys she likes.

Saying “thank you” is not enough to express my gratitude to my sister. I tell my daughter that my sister helps me out with taking care of her. I encourage her to do what she can to express our thankfulness. We pick gifts for my niece together and also hang out with them frequently.

In addition, reading books about the practice of gratitude is another strategy that Chinese parents used to foster the development of gratitude in their children. Examples include the following:

China 11: Um...reading children’s books together. Stories in children’s books provide good examples for her to learn how to interact with others. She learns a lot from those stories that it is important to put herself in other’s shoes. You learn how to take other’s perspectives and then understand that you should be thankful and express your gratitude.

China 12: My son and I read children’s books together. You know, I’m a book editor, I choose books that are easy for him to understand and to learn how to interact with his family, friends, and teachers. I believe stories in these books could be beneficial to cultivate my son’s gratitude expression.

Parents’ reactions to missed opportunities for gratitude in their children were also explored in the present study. Three different reactions were identified in parents’ interviews. The most common reaction that Chinese and the U.S. parents had was reminding their children immediately. Examples include the following:

The U.S. 947: I would probably just remind her, “you know you should say thank you, or you know be appreciative for something you’ve received.”

The U.S. 1030: I’m sure there have been times where I’d say, “Hey. What do we say?” You know. I would pull her aside right away to make sure that—you know, she understood that she was getting something.

The U.S. 988: Well, I think it comes with like the things [child’s name] said to me. I think it comes from years of “what do you say when somebody does something? What do you do?” And then they get gifts on their birthdays and we make them write “thank you” notes every time.

China 05: I would remind him. I would say “he holds the door for you, what do you say?” or “they give you a birthday gift, it’s something you like, what would you do for them?” Then he will say “thank you” or does something for people who help him or give him something.

In addition, parents may not immediately react to their children’s missing opportunities for gratitude, because they believe that as their children mature, they will gradually gain experiences of when and how to appropriately express their sincere gratefulness to others. Examples include the following:

The U.S. 744: Almost kind of weird where like [child’s name] says please and thanks, but it’s almost robotic I think. You know it hasn’t got to the point where it actually resonates with the spirits, right now he’s just doing. It like...like a robot and that’s fine because when it gets to the point where he makes the connection with himself. When he gets older it will all come together.

The U.S. 834: I don’t push...I don’t push that upon them. If I did impress that upon them that leaves him vulnerable, because then instead of them using their intuition and acknowledging the fact that their grateful but uncomfortable or grateful, and want to interact with that person. When you force a person or a child to be grateful or more grateful than they wanna be, you leave them open for hurt and stress.

China 10: I don’t force my daughter to say “thank you.” If she doesn’t want to say it, I will let it be. Sometimes I will say it [thank you] for her to someone helped her. I believe she gains experiences through observation. When she becomes a big girl, she knows when and why she should express her gratitude to others.

China 22: I don’t push her to say “thank you,” to express her gratitude. Sometimes, if I force her to do something, she may feel saying “thank you” is what that my mom wants me to do. It’s not sincere gratitude. I would guide her, and let her know that people who give her something or help her are really nice, and they care for her. Then I believe she will gradually understand why she should express her thankfulness and gratitude to them [people who helped her].

The third type of reactions that parents had is having a discussion with their children about the missing opportunity for gratitude. They regarded it as a good lesson for the child to learn appropriate grateful responses. Examples are as the following:

The U.S. 1001: Um...I may not say something right then at that moment, because he's not listening, or he's not in the zone to appreciate it. But I will filter that into a conversation at a later time.

The U.S. 1003: If there's a lot of people watching she doesn't want the attention, so if somebody gives her food in a buffet line or something she's less likely to say "thank you" because there are so many people around. We would definitely talk about it probably. Yeah, I would say, "You remember when so and so came up to you? What would have been the right thing to say? What would have been the nice thing to say? Maybe to acknowledge her for complimenting you, acknowledge her for giving you that drink that you—that you asked for." Um so—but I wouldn't do it in front of that other person, I would do it in private.

The U.S. 986: We usually have a discussion about it [gratitude] and it's "you know [you] need to have eye contact and we need to talk about this." She just had a birthday party and I really wanted to make sure she said "Thank you" to people—for people to come. So I'm much more likely in those situations to have a one on one serious discussion about why we need to thank people than I am if she forgets to say "Thank you" to me.

China 14: Sometimes I don't say something at that moment, but I will talk with my daughter about what happened and why she should say "Thank you" later. Last week my daughter, [child's name] classmate came and visited us. When they were playing, [child's name] asked me to hand something to her. Her classmate said "Thank you" to me, but [child's name] did not say or do anything... [to express her thankfulness]. And her classmate, her friend, said "you should thank your mom." At that moment, I blamed myself for not doing enough to teach her how to appropriately interact with others. At the end of that day, I had a discussion with [child's name], and we talked about why she forgot to thank me and when she should express her thankfulness.

China 04: We are planning a trip to Japan. My friend gave me a lot of suggestions and help. My daughter and I had a conversation about this trip at bedtime yesterday. I told my daughter that my friend helped us out with planning the trip. We should be grateful to my friend, because she spent a lot of time on this, and she doesn't have to do that for us. I think bedtime is a perfect time to connect with her and to teach her something new.

China 03: Several days ago, my friend gave my son a toy. It's my son's favorite. He mentioned that he likes this toy at a party several months ago. And my friend kept this in her mind and bought my son this toy when she was on her business trip. My son is a little bit shy. Because there were a lot of people there, he was too shy to say anything. I encouraged him to say "thank you." He said "thanks," but he didn't have eye contact with my friend. When we got home, we had a serious conversation about this. I know that he likes the person who gave him the toy. I asked him why he didn't show his thankfulness at that moment. I told him that my friend is so nice, because she remembered that my son wants a toy like that. I want my son to realize that this person did something really nice for him.

Research Question IV: Links among Gratitude, Wishes, and Spending Preferences

Expressions of Gratitude and Wish Types

Given the cultural differences revealed in previous sections, analyses were conducted separately for the Chinese and the U.S. sample. To explore the relation between wish types and gratitude expressions, each type of gratitude was regressed on all three types of wishes, controlling for age and gender.

Consistent with what has been expected, results indicated that Chinese children who had wishes related to social well-being were more likely to express connective gratitude [$\chi^2(1) = 5.31, B = .99, e^B = 2.70, p < .05$], after controlling for age and gender (Table 14). Additionally, Chinese children who had hedonistic wishes were three times more likely to express concrete gratitude than those who did not have hedonistic wishes, $\chi^2(1) = 6.22, B = 1.18, e^B = 3.26, p < .05$.

However, for the U.S. sample, results did not support the hypothesis that there would be a relation between social-oriented wishes and connective gratitude, as well as a relation between hedonistic wishes and concrete gratitude (Table 14). Instead, a relation between self-oriented wishes and verbal gratitude was found. To be specific, U.S.

children who wished for self well-being were more likely to express verbal gratitude than those who did not wish for self well-being, $\chi^2(1) = 4.08$, $B = 0.81$, $e^B = 2.24$, $p < .05$.

Gratitude and Spending Preferences

Four separate linear regression analyses were run for investigating associations between age, gender, gratitude expressions and each of the four categories of spending preferences. As shown in Table 15, Chinese children's desire to buy gifts for family and friends decreased with age ($\beta = -.12$, $p < .05$). In addition, children who expressed verbal gratitude were more likely than those who did not to spend more money on buying gifts for others ($\beta = .13$, $p < .05$). As hypothesized, connective gratitude was positively linked to the amount of money children gave to charity ($\beta = .13$, $p < .05$). That is, Chinese children who expressed connective gratitude were more likely to spend a larger amount of money on charity than those who did not have wishes related to social well-being.

For U.S. children and adolescents, older children were less likely than their younger counterparts to express desire to buy things for family and friends ($\beta = -.12$, $p < .05$), and tended to save a larger amount of money for the future ($\beta = .12$, $p < .05$). Concerning the relation between gratitude expression and spending preferences, results did not support the hypothesis. That is, the associations between expressions of gratitude and spending preferences were not significant among U.S. children.

CHAPTER VI

DISCUSSION

The present study advances the discussion of the conceptualization of gratitude by viewing gratitude as a moral virtue from an a neo-Aristotelian perspective (e.g., Gulliford et al., 2013; McConnell, 1993; Roberts, 2016; Tudge, Freitas, & O'Brien, 2015).

According to Tudge, and his colleagues, gratitude is a dispositional tendency to appropriately show sincere gratefulness to a benefactor for a gift given or help received and at least wish to autonomously repay the benefactor with something that the benefactor wants or likes. In order to possess virtuous gratitude, one needs to acquire certain sociocognitive abilities (e.g., theory of mind), as well as to engage in increasingly complex and relevant practices through which one not merely gains experience of how to think and act in accordance with the principals of moral virtue, but also internalizes standards that are morally required. Thus, virtuous gratitude develops through education and training. Viewing gratitude as an educable virtue contributes to the understanding of the developmental trajectories of gratitude and how this process is influenced by different factors, such as cultural values, parenting, and socio-cognitive abilities.

Beyond that, this study extends the existing literature by testing a series of theory-driven hypotheses. Specifically, the present study took a developmental perspective and explored age-related patterns of children's expressions of verbal, concrete, and connective gratitude. Additionally, this study examined similarities and differences in

children's expressions of gratitude in China and the United States which are considered culturally different. Findings of the present study provide supporting evidence to bioecological theory (Bronfenbrenner & Morris, 1998, 2006) and cultural-ecological theory (Tudge, 2008) that human development is influenced by synergistic effects of different factors, such as person characteristics and cultural values.

Furthermore, the present study is unique in examining the relation between parents' values and children's expression of gratitude in China and the United States. The examination of cultural differences in the development of gratitude has great potential to yield important implications for the theoretical understanding of linkages between cultural values and moral development among children and adolescents. Additionally, the present study seeks to identify strategies that used by Chinese and U.S. parents to cultivate their children's gratitude.

Finally, the present study contributes to the literature by exploring how children's expressions of gratitude may be related to their wish types and spending preferences. This may provide implications for developing culturally relevant interventions which aim to foster children's gratitude expressions as well as their prosocial tendency within different contexts.

Age and Gender Differences in Expressions of Gratitude

As Bronfenbrenner's (Bronfenbrenner & Morris, 1998, 2006) bioecological theory suggests, personal characteristics are not merely products of development, but also act as producers supporting the direction of proximal processes. Specifically, age and sociocognitive abilities are important factors that influence the way children and

adolescents express gratitude to their benefactors. Due to limits in sociocognitive abilities, saying “thank you” to benefactors is an appropriate way for young children to express gratitude. For adolescents, the acquisition of experiences in different circumstances and advance in perspective-taking skills contribute to progressions in their expression of gratitude. Therefore, expression of connective gratitude is more likely to be found in adolescents.

As had been expected, older children were more likely to express connective gratitude and were less likely to express concrete gratitude than were the younger ones. These results are consistent with previous findings (e.g., Baumgarten-Tramer, 1938; Freitas et al., 2011). This may be because children’s expressions of gratitude are limited by their socio-cognitive abilities and experiences relevant to gratitude expressions. Younger children were less capable of taking others perspective than were the older ones. For young children, repaying their benefactors with something that they themselves like may be the optimal way that they are able to come up with to express sincere gratitude to their benefactors. In contrast, adolescents understand that mutual respect is important in interpersonal interactions, and have more experience regarding when and why gratitude should be felt and how gratefulness should be expressed, they become more capable of appropriately expressing gratitude to their benefactors than did their younger counterparts.

Although gender-based results were not hypothesized, I found that girls were more likely than boys to express verbal gratitude. This result is consistent with Kashdan, Mishra, Breen, and Froh’s (2009) findings, which suggested that females reported less

burden and greater gratitude for a gift received as compared with males. Females possibly are socialized to focus on maintaining good interpersonal relationships with others (Gordon, Musher-Eizenman, Holub, & Dalrymple, 2004). This may also due to gender differences in social emotional skills. Females are more capable of noticing their emotions as compared with males (Barrett, Lane, Sechrest, & Schwartz, 2000); and higher levels of grateful emotions might reinforce their willingness to openly express gratitude (Kashdan et al., 2009). However, there was no evidence showing that girls were more likely than boys to express concrete and connective gratitude.

Cultural Differences in Expressions of Gratitude

Tudge's (2008) cultural-ecological theory suggests that cultural contexts provide the settings where interpersonal interactions and everyday activities take place. An important component of the cultural context is cultural values (Schwartz, 1994), which are reflected in the moral virtues highly valued by the members of the cultural group. Gratitude as a moral virtue, possesses a central position in most cultures; however, how to appropriately express gratitude and the means by which parents foster children's gratitude development are different in different cultures (Merçon-Vargas, 2017).

According to Kağıtçıbaşı (2007), urban educated Chinese parents value autonomy and relatedness, and tend to encourage cooperative behaviors and a strong sense of agency in their children, which are important building blocks of virtuous gratitude (Tudge et al., 2015) as well as prosocial tendencies (Knight, Carlo, Basilio, & Jacobson, 2015; Lai, Siu, & Shek, 2015).

Consistent with what had been predicted, results of logistic regression analyses indicated that Chinese children were more likely to express connective gratitude, and less likely to express verbal and concrete gratitude than were the U.S. children. Cultural differences in children's expressions of gratitude may due to the differences in cultural values and parents' socialization goals in China and the United States. These results replicate the prior, limited work on gratitude development in China and the United States and suggest that, even in Chinese urban contexts where autonomy values might be increasingly emphasized, the value of relatedness continues to be socialized whereby Chinese children still appear more relationally-oriented in their expressions of gratitude as compared to children in the United States, where autonomy tends to take greater precedence.

Additionally, gratitude is deeply embedded in Chinese culture. There are Chinese idioms emphasizing the obligation to remember the benefactor for a lifelong time and to return the favor when possible. For instance, the idiom says "make a grass knot or a jade ring to repay kindness (jie cao xian huan)," and a Chinese proverb states "a drop of beneficent water should be repaid with overflowing fountains of gratitude (di shui zhi en dang yong quan xiang bao)." Considering that gratitude has been given a central position in Chinese philosophical theories and tradition, it is not surprising that the majority of Chinese youth express connective gratitude, which is considered the most sophisticated form of gratitude and conceptually closest to the idea of gratitude as a moral virtue.

Furthermore, consistent with Wang and colleagues' (2015) findings, the probability of expressing concrete and verbal gratitude remained relatively stable across

age among Chinese children. This pattern is different than what has been found with the North American sample, suggesting distinct socialization strategies for virtuous gratitude in different cultures.

Parental Values and Children's Expressions of Gratitude

Drawing on Kağıtçıbaşı's (2007) theoretical model, the present study validated the RASH scale, examined its measurement invariance in a sample of Chinese and North American parents. Findings mostly suggest that the RASH scale is a reliable and a theoretical relevant measurement of parental values.

Results of the present study pointed to the multidimensionality of parental socialization goals, which are comprised by dimension of interpersonal distance, ranging from relatedness to separated, and agency, ranging from autonomy to heteronomy. These results indicated that a multidimensional perspective of cultural orientation may be more valuable than a unidimensional perspective in understanding both Chinese and the U.S. parents' socialization goals.

In line with the hypothesis, I found that parents' autonomous goals were positively correlated with relational goals in both Chinese and American samples. This result, to some extent, lends credence to Kağıtçıbaşı's (2007) theory, which suggests that autonomy could be positively associated with relatedness. Specifically, the average score of autonomy and relatedness for both group were higher than 5, suggesting that both the Chinese and the U.S. parents think these two types of goals are important. This result indicated that psychological interdependence family model is common and might be the most optimal parent-child interaction dynamic for families in urban/developed areas. In

the urban areas, the industrial and service economy decreases material interdependence between family members, but requires a high level of autonomy, which helps people choose and initiate their own actions in everyday life. As a result, urban parents attach high importance to autonomous goals, and deliberately encourage a strong sense of agency in their children (Chen et al., 2010; Joussemet, Landry, & Koestner, 2008). Parents' promotion of autonomy allows children to obtain a strong sense of agency and more complex cognitive development (Yeh & Yang, 2006). Additionally, material interdependence between family decreases the material values of children, but raises their psychological values (Kağıtçıbaşı, 2003). Furthermore, as Yeh and Yang noted, parents' promotion of relatedness fosters more compatibility in developing and regulating relationships with others. Therefore, values of autonomy and relatedness are not opposed and, in fact, can function in cohesive and integrative ways among urbanized China and the United States.

However, findings that the four latent factors were positively associated with each other (except for the association between separateness and relatedness, which were not negatively corrected as Kağıtçıbaşı would have predicted) are contrary to Kağıtçıbaşı's (2007) theory. That is, these values are not opposites and may not be considered isomorphic, but should be viewed as different concepts (Merçon-Vargas, 2017). The coexistence of these cultural orientations could be found in all cultures, but the relations between them are dynamic and change depending on the developmental phases, situation and social contexts (Tamis-LeMonda et al., 2008). That is, relations among these cultural

orientations may not always be conflicting, but could be additive or functionally dependent.

After confirming the four-factor structure of parental values for their children among Chinese and the U.S. sample, I examined relations between these values and each type of gratitude expressions. However, results did not support the hypothesis that parental values for autonomy and relatedness would be associated with connective gratitude. A negative association between values of separateness and concrete gratitude was found in Chinese children and adolescents above and beyond the effects of age, gender, and other types of parental values. Concrete gratitude is inherently relational; although it is less sophisticated than connective gratitude, it reflects the beneficiary's desire to repay the benefactor. Additionally, Chinese culture emphasizes the necessity of reciprocity in maintaining harmonious interpersonal relationships (Liu, Lu, Liang, & Wei, 2010; Wang, Razzaque, & Keng, 2007). Receiving gifts or help but not repaying is considered morally unacceptable (Steidlmeier, 1999). Therefore, parents who attached lower level importance to separatedness values may be more likely to promote children's behaviors of regulating and strengthening interpersonal relationships.

The preliminary analyses revealed that the expression of connective gratitude were negatively related to the parental value of separateness among the U.S. participants. As noted by Tudge and colleagues (2015), the expression of connective gratitude requires some levels of perspective taking ability. Parents who value separateness less may intentionally create an environment that could promote their children's capability of understanding other's intentionality. However, this relation was not significant after

controlling for the effects of age, gender, and other types of parental values. The implication of this result should be further examined and more studies on the associations between parental values and gratitude expression across different cultural groups are needed.

Parenting and Gratitude Development

Bioecological theory (Bronfenbrenner & Morris, 1998, 2006) and a neo-Aristotelian tradition of virtue (Annas, 2011) suggest the pivotal role that everyday activities and interactions between parents and children play in the moral development. Young children first learn how to express thankfulness by observing their role model saying “thank you” in different situations. Then they practice saying “thank you” and imitate what their parents have done. Parents’ and teachers’ encouragement of gratitude expression and explanation for why gratitude is necessary in different contexts provide opportunities for children to practice gratitude-related behaviors. Parents’ instruction and motivation for appropriate gratitude expression may be particularly important when children encounter increasingly complex situations as they grow up. Through these parent–child interactions and everyday activities, children will gradually gain experiences of how to appropriately react to benefits received and benefactors, as well as understandings of why these responses are necessary in certain situations.

Similar to what has been found by Hussong and her colleagues (2016) and consistent with hypotheses III, results of the present study suggested that parents adopted various kinds of strategies to foster the development of virtuous gratitude in their children. Specifically, role modeling, reinforcing gratitude expression behaviors, and

having a one-on-one discussion about gratitude were used by both Chinese and the U.S. parents.

I further examined parents' reactions to children's missed opportunities for gratitude in their children. Consistent with previous research findings (e.g., Hussong et al., 2018), results indicated that the most common reaction that parents had was reminding their children immediately. This may be particularly salient for acquiring experiences of expressing gratitude in different contexts.

Additionally, parents are likely to reminisce about missed opportunities for gratitude with their children. As Hussong and colleagues (2018) suggested, in conversations about shared experiences parents explained why certain things happen and why certain responses are appropriate in certain situations, and help children understand the complex emotion of gratitude. Parent-child conversations about previous events may influence children's acquisition of emotion knowledge (Laible, 2004; Wang, 2001) and theory of mind (Reese & Cleveland, 2006), which may contribute to the development of gratitude.

Moreover, both the Chinese and the U.S. parents emphasized the importance of the intrinsic motivation to express gratitude. Results revealed that some parents were reluctant to force their children to say "thank you." These parents believed that pushing their children to express gratitude may hinder their internalization of the value of gratitude, because children may relate negative emotions to gratitude expressions. The "let it be" strategy may be associated with parental autonomy support, which leads to

higher levels of reasoning abilities to make better moral choices (Reeve, 2006) and better understandings of gratitude in children (Bono & Odudu, 2016).

As suggested by Tudge's (2008) cultural-ecological theory, cultural contexts provide the settings where proximal processes take place, and influences the types of activities that are valued and the manners of interactions among people. Consistent with Tudge's notion, cultural differences in parents' socialization of gratitude were found. Results indicated that Chinese parents emphasized the importance of expressing gratitude to family and relatives and encouraged their children to strengthen their family ties. In Chinese society, the family plays a critical role in teaching children the importance of maintaining group harmony (Hofstede & Bond, 1988; Wang et al., 2007). Expressing gratitude to family members may be regarded as an important way for socializing gratitude. Furthermore, establishing high-quality relationships with family and relatives may contribute to the developmental of gratitude (Bono & Odudu, 2016). As Bono and Odudu suggested, gratitude expression develops more deeply when it is practiced regularly in the course of quality social relationships.

Gratitude, Wishes, and Spending Preferences

In terms of society differences in types of wishes that children express, I found that two thirds of the Chinese participants expressed self-oriented wishes, whereas most of the U.S. participants expressed hedonistic wishes. I further explored subcategories of wishes that Chinese children expressed. Results indicated that most Chinese children's self-oriented wishes were related to their education and career goals (e.g., attain a college degree, become a teacher). Children's emphasis on their educational and career goals

may reflect the current cultural values and social changes in urban China. Over the past several decades, China has experienced rapid societal and political changes since the government carried out key economic reforms. On the one hand, the transition to a market economy poses an increasing number of challenges to families and individuals as they experience an unfamiliar and rapidly changing environment and strive to meet the demands of the new context (Chen et al., 2010; Zhang, Wang, & Fuligni, 2006). On the other hand, the economic and political reform markedly enhances life chances and quality in China. In the new context, personal development and success become increasingly important (Zeng & Greenfield, 2015). Therefore, children growing up in this context may express more wishes related to their education and personal goals than other types of wishes.

The findings of the present study suggested that children's wishes were significantly associated with gratitude for both the Chinese and the U.S. children but in different ways. Consistent with the hypothesis, Chinese children who wished for social well-being were more likely to express connective gratitude than those did not have such wishes. This result indicated that the expressions of connective gratitude is driven by intrinsic goals and others-oriented motivations (Froh et al., 2011). Additionally, a positive link between hedonistic wishes and concrete gratitude was found among Chinese children. These results are aligned with prior research findings and provide supporting evidence to the notion that materialism (e.g., having hedonistic wishes) may be associated with a self-centered way of expressing gratefulness (Freitas et al., 2016;

Merçon-Vargas, 2017) and conflict with values concerning others' wellbeing (Briggs et al., 2007).

Similar to what has been found in the Chinese sample and findings of Wang et al.'s (2015) findings, the U.S. children who had social-oriented wishes were more likely to have connective gratitude as a general trend. In addition, the U.S. children's expressions of verbal gratitude were predicted by self-oriented wishes. These difference in associations between gratitude and wish types among Chinese and the U.S. children may due to distinct cultural values and virtue socialization strategies. Future studies are needed to further understand the cultural differences in the relation between gratitude and wish types in these two societies.

Regarding the associations between gratitude and spending preferences, a positive relation between connective gratitude and preferences to give to charity has been found among Chinese children. Hence, Chinese children's helping intentions and expressions of connective gratitude appear to be closely related to caring about others' welfare and feeling connected to others. In addition, buying gift for others was positively related to verbal gratitude. One possibility may be that saying "thank you" and gift-giving behaviors are directly linked to the Chinese life philosophy that "propriety calls for reciprocity (li shang wang lai)." It is possible that verbally expressing thankfulness and gift giving are both considered as a reciprocal way to interact with others based on the propriety (li) of Chinese culture.

Limitations and Suggestions for Future Research

The present study moves the field beyond simply viewing gratitude as a positive emotion or a positive reframing tendency by conceptualizing gratitude as a moral virtue. Moreover, this study makes a contribution to the theoretical understanding of how cultural values, person characteristics and parenting practice influence the development of gratitude. Findings of the present study may provide valuable implications for possible interventions aiming at promoting children's prosocial tendencies and moral development by highlighting factors that may facilitate these positive developments. However, several limitations should be addressed in further studies.

Given that human development is driven by the synergistic effects of different factors (Bronfenbrenner & Morris, 1998, 2006), it is important to investigate the synergistic and unique contribution of proximal processes (e.g., parent-child interactions and everyday activities), person characteristics (e.g., socioemotional abilities), cultural values, and historical time to the development of gratitude. The examination of synergistic effects of these factors on gratitude expression may provide important educational implications for educators and practitioners aiming to develop effective intervention programs for character development.

Additionally, the current study used a cross-sectional design and was unable to draw conclusions about causality or direction of effects. As the causality cannot be assumed, there might be bi-directional relations between gratitude expression and parental values, as well as between gratitude and wish types. Future studies are

warranted to examine causal relations among gratitude, parental values, and wishes using a longitudinal design.

In addition, the data of the present study were collected in a single city in each of the two countries; therefore, the generalizability of findings is limited by the characteristics of this sample. Considering that both China and the United States are countries with diverse ethnic groups, further studies are needed to explore the within-society differences in the development of gratitude, as well as how parents in different ethnic groups foster gratitude expression in children.

Furthermore, more research should be conducted to explore the function of parent–child reminiscing of shared experiences in the development of gratitude in different cultures. Prior research demonstrated that North American and Chinese parents have different foci when having conversations with their children about shared experiences (e.g., Wang, 2001; Wang & Fivush, 2005). Wang and Fivush found that the American mothers in their sample primarily focused on the causes of emotions in given circumstances, whereas the Chinese mothers emphasized discipline and appropriate behaviors. They also noticed that, when having reminiscing about shared experiences with parents, the North American children focused on autonomous talk, whereas Chinese children paid more attention to social interactions. Therefore, culture may influence parents' styles of reminiscing, which may ultimately affect children's responses to parent–child conversation, their own styles of reminiscing, and sociocognitive development.

Conclusions

Findings of the present study advance the theoretical understanding of cultural variations in children's expression of gratitude. Additionally, the examination of the relation between parental values and gratitude expression contributes to theory development by providing the evidence for the ways in which culture influences the development of gratitude. Moreover, the investigation of the association between gratitude and other prosocial tendencies may inform intervention programs that aim to incorporate gratitude-promotion strategies to promote positive development in children and adolescents.

Several important findings emerged in the present study. First, Chinese children were less likely to express verbal and concrete gratitude, and more likely to express connective gratitude than were the North American children. Additionally, different age-related patterns of expressions of verbal, concrete, and connective gratitude were found. In general, older children were more likely to express connective gratitude and less likely to express concrete gratitude than were their younger counterparts.

Furthermore, parental values and gratitude expressions were related in different ways in the Chinese and the U.S. samples. The parental values of separateness were negatively predicted the expression of concrete gratitude among Chinese participants, whereas in the U.S. sample, separateness was values were negatively associated with connective gratitude.

In socializing gratitude, results indicated that both the Chinese and U.S. parents used various kinds of strategies, including role modeling, discussion about gratitude, and

reinforcing gratitude expression behaviors. Additionally, the Chinese parents emphasized the importance of expressing gratitude to family and relatives and regarded expressing gratefulness to family members as an effective strategy to foster gratitude in children.

Additionally, findings of the present study suggested that children's social-oriented wishes were associated with connective gratitude for both Chinese and the U.S. children. However, cultural differences in the associations between wish types and gratitude were found. Specifically, Chinese children who had hedonistic wishes tended to express concrete gratitude; for the U.S. children, expressions of verbal gratitude were predicted by self-oriented wishes.

Finally, a positive relation between connective gratitude and preferences to give to charity has been found among Chinese children. In addition, Chinese children's preferences of buying gifts for others was positively related to their expressions of verbal gratitude. No significant relations between gratitude and spending preferences were found among the North American youth.

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APPENDIX A

TABLES

Table 1. Parents' Educational Levels

	China (<i>N</i> = 520)			The U.S. (<i>N</i> = 468)	
	Freq	%		Freq	%
Elementary	44	8.5	Elementary	28	6.0
Middle school	117	22.5	Middle school	22	4.7
Some high school	52	10.0	Some high school	45	9.6
Completed high school	90	17.3	Completed high school	50	10.7
Junior college	124	23.8	Some college	81	17.3
Completed college	48	9.2	Completed college	115	24.6
MS or equivalent	2	0.4	MS or equivalent	46	9.8
PhD or equivalent	1	0.2	PhD or equivalent	28	6.0
Missing	9	1.7	Missing	52	11.1
Total	520		Total	468	

Note: Freq = frequency, % = percentage of parents' educational level.

Table 2. Descriptive Statistics for Chinese Children's Wishes and Gratitude ($N = 520$)

	Male		Female		All	
	Freq	%	Freq	%	Freq	%
Wishes						
Hedonistic	50	21.7%	64	22.1%	114	21.9%
Self well-being	153	66.5%	194	66.9%	347	66.7%
Other well-being	43	18.7%	62	21.4%	105	20.2%
Total	246	106.9%	320	110.4%	566	108.8%
Gratitude						
Verbal	54	23.6%	84	29.0%	138	26.5%
Concrete	36	15.7%	45	15.5%	81	15.6%
Connective	156	67.8%	207	71.4%	363	69.8%
Total	246	107.1%	336	115.9%	582	111.9%

Note. Freq = frequency, % = percentage of children expressing that type of wish/gratitude. Some percentages sum to greater than 100 because some children expressed more than one type of wish/gratitude.

Table 3. Descriptive Statistics for North American Children's Wishes and Gratitude (N = 427)

	Male		Female		All	
	Freq	%	Freq	%	Freq	%
Wishes						
Hedonistic	100	50.5%	97	42.4%	197	46.1%
Self well-being	78	39.4%	97	42.4%	175	41.0%
Other well-being	19	9.6%	36	15.7%	55	12.9%
Total	197	99.5%	230	100.5%	427	100.0%
Gratitude						
Verbal	54	27.3%	82	35.8%	136	31.9%
Concrete	74	37.4%	67	29.3%	141	33.0%
Connective	69	34.8%	88	38.4%	157	36.8%
Total	197	99.5%	237	103.5%	434	101.7%

Note. Freq = frequency, % = percentage of children expressing that type of wish/gratitude. Some percentages sum to greater than 100 because some children expressed more than one type of wish/gratitude.

Table 4. Descriptive Statistics for Spending Preferences

Variables	China (N = 520)						The United States (N= 468)					
	Male		Female		All		Male		Female		All	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Buy for Self	15.3	13.4	14.8	12.5	15.0	12.9	22.6	20.5	19.3	17.2	20.8	20.8
Gifts for Others	13.9	12.2	15.3	12.5	14.7	12.3	17.1	16.1	18.2	14.7	17.7	17.7
Save	36.9	27.6	37.5	25.7	37.2	26.5	36.9	26.2	35.8	23.4	36.3	36.3
Give to Charity	33.8	25.5	32.1	25.8	32.8	25.7	24.2	20.3	27.1	19.8	25.7	25.7

Table 5. Correlations Between Key Study Variables of Research Question I and IV

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Society	1.00												
2. Gender	.02	1.00											
3. Age	.09**	.06	1.00										
4. HEDON	-.26**	-.05	-.16**	1.00									
5. SELFW	.25**	.03	.11**	-.67**	1.00								
6. SOCLW	.10**	.05	.13**	-.27**	-.28**	1.00							
7. VB	-.07*	.07*	< .01	-.03	.05	.01	1.00						
8. CC	-.21**	-.05	-.12**	.16**	-.10**	-.06	-.15**	1.00					
9. CV	.31**	.05	.20**	-.14**	.13**	.13**	-.40**	-.50**	1.00				
10. Buy	-.18**	-.06	-0.03	.12**	-.04	-.14**	.06	.04	-.10**	1.00			
11. Gifts	-.11**	.04	-.13**	.03	.01	-.04	.04	< .01	-.04	.08*	1.00		
12. Save	0.02	> -.01	.04	.03	-.01	-.07*	-.04	.03	.01	-.37**	-.40**	1.00	
13. Poor	.15**	.01	.05	-.13**	.01	.20**	-.02	-.04	.07*	-.32**	-.19**	-.60**	1.00
Mean	---	---	10.46	---	---	---	---	---	---	17.60	16.00	36.80	29.6
SD	---	---	2.10	---	---	---	---	---	---	16.12	13.84	25.73	23.5

Note. HEDON = Hedonistic wishes, SELFW = Self-oriented wishes, SOCLW = social-oriented wishes, VB = verbal gratitude, CC = concrete gratitude, CV = connective gratitude, Buy = buying things for self, Gifts = buying gifts for friends and family, Save = saving for future, Poor = donating to the charity.

Table 6. Logistic Regression Analyses of Expressions of Gratitude on Age, Gender, and Society

Step	Predictor	Expressions of Gratitude								
		Verbal			Concrete			Connective		
		<i>B</i>	<i>SE B</i>	e^B	<i>B</i>	<i>SE B</i>	e^B	<i>B</i>	<i>SE B</i>	e^B
1	Age	< .01	0.04	1.00	-0.12	0.04	0.89**	0.19	0.03	1.21***
	Gender	0.34	0.15	1.40*	-0.21	0.16	0.81	0.14	0.14	1.15
	Society	-0.31	0.14	0.74*	-1.00	0.16	0.37***	1.25	0.14	3.47***
2	Age × Society	-0.19	0.07	0.82**	0.22	0.08	1.24*	-0.05	0.07	0.96
	Age × Gender	0.06	0.07	1.06	< 0.01	0.08	1.01	-0.02	0.07	0.98
	Society × Gender	-0.07	0.29	0.93	0.33	0.33	1.39	> -0.01	0.28	1.00

Note. e^B = exponentiated *B*. Gender coded male = 0, female = 1, Society coded the United States = 0, China = 1. Reference group set to first for gender and society. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 7. Logistic Regression Analyses of Expressions of Gratitude on Age, Gender, and Society among Chinese and North American Children

Predictor	China								
	Verbal Gratitude			Concrete Gratitude			Connective Gratitude		
	<i>B</i>	<i>SE B</i>	<i>e^B</i>	<i>B</i>	<i>SE B</i>	<i>e^B</i>	<i>B</i>	<i>SE B</i>	<i>e^B</i>
Age	0.09	0.05	0.92	< 0.01	0.06	1.00	0.17	0.05	1.19***
Gender	0.32	0.2	1.38	0.04	0.25	1.04	-0.15	0.19	0.87
Predictor	United States								
	Verbal Gratitude			Concrete Gratitude			Connective Gratitude		
	<i>B</i>	<i>SE B</i>	<i>e^B</i>	<i>B</i>	<i>SE B</i>	<i>e^B</i>	<i>B</i>	<i>SE B</i>	<i>e^B</i>
Age	0.11	0.05	1.11*	-0.21	0.05	0.81***	0.22	0.05	1.24***
Gender	0.39	0.21	1.48†	-0.37	0.21	0.69†	-0.14	0.21	0.87

Note. e^B = exponentiated *B*. Gender coded male = 0, female = 1. Reference group set to first for gender. † $p < .10$, * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 8. Descriptive Statistics of the Items of the RASH Scale

Item	Mean	SD	Skewness		Kurtosis	
			Statistic	SE	Statistic	SE
Item #1 (HET)	6.83	2.20	-0.85	0.09	-0.30	0.17
Item #2 (AUT)	5.71	2.40	-0.34	0.09	-0.99	0.17
Item #3 (AUT)	5.82	2.24	-0.29	0.09	-0.75	0.17
Item #4 (SEP)	3.75	2.24	0.57	0.09	-0.55	0.17
Item #5 (HET)	6.15	2.31	-0.52	0.09	-0.72	0.17
Item #6 (SEP)	4.58	2.68	0.17	0.09	-1.26	0.17
Item #7 (REL)	7.12	1.93	-1.07	0.09	0.68	0.17
Item #8 (HET)	4.53	2.18	0.21	0.09	-0.75	0.17
Item #9 (HET)	4.89	2.34	0.03	0.09	-1.00	0.17
Item #10 (REL)	7.32	1.77	-1.17	0.09	0.95	0.17
Item #11 (REL)	7.50	1.58	-1.08	0.09	0.66	0.17
Item #12 (AUT)	6.80	2.10	-0.88	0.09	0.11	0.17
Item #13 (AUT)	7.68	1.54	-1.49	0.09	2.43	0.17
Item #14 (SEP)	6.09	2.97	-0.57	0.09	-1.21	0.17
Item #15 (AUT)	5.55	2.14	-0.26	0.09	-0.74	0.17
Item #16 (HET)	5.59	2.59	-0.25	0.09	-1.17	0.17
Item #17 (REL)	6.61	2.01	-0.79	0.09	-0.06	0.17
Item #18 (HET)	6.75	1.89	-0.66	0.09	-0.17	0.17
Item #19 (SEP)	5.94	2.46	-0.50	0.09	-0.86	0.17
Item #20 (REL)	7.18	1.73	-0.91	0.09	0.55	0.17
Item #21 (AUT)	6.39	1.95	-0.61	0.09	-0.14	0.17
Item #22 (REL)	7.28	1.67	-1.11	0.09	1.19	0.17
Item #23 (HET)	5.82	2.35	-0.37	0.09	-0.86	0.17
Item #24 (SEP)	3.53	2.33	0.79	0.09	-0.38	0.17
Item #25 (SEP)	5.43	2.35	-0.16	0.09	-0.89	0.17
Item #26 (REL)	7.44	1.81	-1.38	0.09	1.57	0.17
Item #27 (SEP)	3.18	2.39	0.90	0.09	-0.37	0.17
Item #28 (REL)	6.59	1.92	-0.65	0.09	-0.03	0.17
Item #29 (HET)	5.52	2.25	-0.20	0.09	-0.79	0.17
Item #30 (AUT)	7.85	1.63	-1.86	0.09	3.69	0.17

Note. HET = heteronomous values, AUT = autonomous values, SEP = separated values, REL = relational values.

Table 9. Factor Loading of Each Items of the 17-item Scale for the Overall Model

	Heteronomy		Autonomy		Separate		Relatedness	
	Unstd (<i>SE</i>)	Std	Unstd (<i>SE</i>)	Std	Unstd (<i>SE</i>)	Std	Unstd (<i>SE</i>)	Std
HET # 8	----	0.62						
HET # 9	1.13 (.08)	0.66						
HET # 16	1.15 (.10)	0.61						
HET # 29	0.95 (.08)	0.58						
AUT # 3			----	0.56				
AUT # 15			1.25 (.11)	0.73				
AUT # 21			0.78 (.08)	0.50				
SEP # 4					----	0.59		
SEP # 24					1.14 (.10)	0.65		
SEP # 27					1.24 (.10)	0.69		
REL # 10							----	0.70
REL # 11							0.88 (.06)	0.69
REL # 17							0.97 (.07)	0.60
REL # 20							0.81 (.06)	0.59
REL # 22							0.83 (.06)	0.62
REL # 26							0.79 (.06)	0.54
REL # 28							0.85 (.07)	0.55

Note. Unstd = unstandardized factor loading, Std = standardized factor loading. All factor loadings were significant. HET = heteronomous values, AUT = autonomous values, SEP = separated values, REL = relational values.

Table 10. Tests of Measurement Invariance of the Related-Autonomy-Separated-Heteronomy (RASH) Four-Factor Latent Structure across the Chinese and U.S. Samples

Measurement invariance	Model fit						Nested model comparisons			
	χ^2	df	p	CFI	RMSEA	SRMR	Model comparisons	χ^2 diff	df	ps
M1: Form invariance	396.97	206	< .001	.94	.05	.05				
M2: Pattern invariance	418.82	219	< .001	.94	.05	.05	M2 vs. M1	21.85	13	> .05
M3a: Scalar invariance	796.38	232	< .001	.83	.08	.08	M3 vs. M2	377.56	13	< .001
M3b: Partial equal intercepts	421.94	222	< .001	.94	.05	.06	M3b vs. M2	3.12	3	> .05
Population heterogeneity										
M4: Baseline	421.94	222	< .001	.94	.05	.06				
M5: Equal factor variance	441.34	226	< .001	.94	.05	.07	M5 vs. M4	14.43	4	> .05
M6: Equal factor covariance	455.69	232	< .001	.93	.05	.07	M6 vs. M5	14.35	6	> .05
M7: Equal factor mean	630.31	236	< .001	.88	.06	.08	M7 vs. M6	174.62	4	< .001

Note. The baseline model for evaluation of population heterogeneity is a model in which all measurement parameters previously tested are constrained to equality (with the exception of intercepts of 12 indicators). N = 949. χ^2 diff = nested χ^2 difference; CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual.

Table 11. Correlations between Expressions of Gratitude and Chinese Parents' Values for Their Children

	VB	CC	CV	HET	AUT	REL	SEP
VB	1.00						
CC	-.08	1.00					
CV	-.48**	-.47**	1.00				
HET	-.07	-.04	.11*	1.00			
AUT	< .01	.03	.02	.28**	1.00		
REL	-.01	.03	.02	.36**	.21**	1.00	
SEP	< .01	-.10*	.07	.45**	.35**	.01	1.00
Mean	---	---	---	18.10	16.86	49.91	10.47
<i>SD</i>	---	---	---	6.25	4.50	8.13	5.01

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. VB = verbal gratitude, CC = concrete gratitude, CV = connective gratitude. HET = heteronomous values, AUT = autonomous values, SEP = separated values, REL = relational values.

Table 12. Correlations Between Expressions of Gratitude and U.S. Parents' Values for Their Children

	VB	CC	CV	HET	AUT	SEP	REL
VB	1.00						
CC	-.26**	1.00					
CV	-.30**	-.47**	1.00				
HET	.02	.05	-.08	1.00			
AUT	.07	.03	-.07	.46**	1.00		
SEP	.05	.06	-.14*	.47**	.43**	1.00	
REL	.07	-.01	-.01	.38**	.16**	.02	1.00
Mean	---	---	---	23.59	18.85	10.24	50.25
SD	---	---	---	6.57	4.83	5.82	8.74

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. VB = verbal gratitude, CC = concrete gratitude, CV = connective gratitude. HET = heteronomous values, AUT = autonomous values, SEP = separated values, REL = relational values.

Table 13. Logistic Regression Analyses of Expressions of Gratitude on Age, Gender, and Society among Chinese and North American Children

Predictor	China ($N = 520$)								
	Verbal Gratitude			Concrete Gratitude			Connective Gratitude		
	B	$SE\ B$	e^B	B	$SE\ B$	e^B	B	$SE\ B$	e^B
Age	-0.02	0.06	0.98	-0.04	0.07	0.96	0.12	0.06	1.13*
Gender	0.27	0.25	1.30	0.14	0.29	1.15	0.07	0.22	1.07
Relatedness	0.01	0.02	1.01	0.01	0.02	1.01	-0.02	0.02	0.99
Autonomy	-0.02	0.03	0.98	0.05	0.04	1.05	0.01	0.03	1.01
Separate	0.02	0.03	1.02	-0.08	0.04	0.92*	0.01	0.03	1.01
Heteronomy	-0.03	0.02	0.97	-0.01	0.03	0.99	0.04	0.02	1.04
Predictor	United States ($N = 429$)								
	Verbal Gratitude			Concrete Gratitude			Connective Gratitude		
	B	$SE\ B$	e^B	B	$SE\ B$	e^B	B	$SE\ B$	e^B
Age	0.65	0.29	1.11	-0.31	0.07	0.73*	0.26	0.07	1.30***
Gender	0.10	0.07	1.91*	-0.24	0.28	0.79	-0.08	0.26	0.92
Relatedness	0.02	0.02	1.02	-0.01	0.02	0.99	0.01	0.02	1.01
Autonomy	0.04	0.03	1.04	0.00	0.03	1.00	0.01	0.03	1.01
Separate	0.05	0.03	1.05	-0.02	0.03	0.99	-0.03	0.03	0.97
Heteronomy	-0.02	0.03	0.98	0.02	0.03	1.02	-0.03	0.03	0.97

Note. Step 2 of analyses included in table. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 14. Logistic Regression Analyses of Age, Gender, and Wish Type on Types of Gratitude

<i>China (N = 520)</i>									
Predictor	Verbal Gratitude			Concrete Gratitude			Connective Gratitude		
	<i>B</i>	<i>SE B</i>	e^B	<i>B</i>	<i>SE B</i>	e^B	<i>B</i>	<i>SE B</i>	e^B
Age	-0.08	0.05	0.92	-0.02	0.06	0.98	0.22	0.05	1.24***
Gender	0.32	0.2	1.37	-0.03	0.25	0.98	0.07	0.2	1.07
Wish Type									
Hedonistic	0.17	0.42	1.18	1.18	0.47	3.26*	0.08	0.47	1.08
Self well-being	0.08	0.39	1.08	0.69	0.44	2.00	0.68	0.44	1.98
Other well-being	-0.02	0.36	0.98	0.42	0.40	1.52	0.99	0.43	2.70*
<i>United States (N = 429)</i>									
Predictor	Verbal Gratitude			Concrete Gratitude			Connective Gratitude		
	<i>B</i>	<i>SE B</i>	e^B	<i>B</i>	<i>SE B</i>	e^B	<i>B</i>	<i>SE B</i>	e^B
Age	-0.08	0.06	1.06	-0.19	0.06	0.83***	0.23	0.06	1.26***
Gender	0.32	0.22	1.44	-0.35	0.21	0.70	0.14	0.21	1.15
Wish Type									
Hedonistic	0.35	0.42	1.42	0.34	0.39	1.40	0.76	0.40	2.13
Self well-being	0.81	0.40	2.24*	0.15	0.4	1.16	0.57	0.40	1.77
Other well-being	0.79	0.44	2.20	0.07	0.46	1.08	0.81	0.44	2.24†

Note. e^B = exponentiated *B*. Gender coded male = 0, female = 1, Wish Types coded no = 0, yes = 1.

Reference group set to first for gender and all wish types. Step 2 of analyses included in table.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 15. Regression Analyses of Age, Gender, and Gratitude Type on Spending Preferences

China ($N = 520$)												
Predictor	Buy for Oneself			Gifts for Others			Save			Give to Charity		
	B	$SE\ B$	β	B	$SE\ B$	β	B	$SE\ B$	β	B	SE	β
Age	0.49	0.28	.08	-0.69	0.264	-.12*	0.58	-0.02	-.03	0.55	0.05	.05
Gender	-0.62	1.14	-.02	1.23	1.09	.05	2.38	0.02	0.01	2.29	-0.04	-.04
Gratitude Type												
Verbal	2.24	1.63	.08	3.56	1.56	.13*	3.41	-0.03	.02	3.28	-0.05	-.03
Concrete	-1.80	2.01	-.05	-1.26	1.93	-.04	4.21	0.02	-.02	4.05	0.04	-.03
Connective	-1.79	1.77	-.07	1.98	1.69	.08	3.69	-0.03	-.09	3.55	0.02	.13*
R^2		0.94			0.03			< .01			< .01	
F		1.94			3.45*			0.25			0.98	
United States ($N = 429$)												
Predictor	Buy for Oneself			Gifts for Others			Save			Give to Charity		
	B	$SE\ B$	β	B	$SE\ B$	β	B	$SE\ B$	β	B	SE	β
Age	-0.67	0.46	-.07	-0.86	0.37	-.12*	1.41	0.60	.12*	< .01	0.49	< .01
Gender	-3.23	1.86	-.09	1.19	1.51	.04	-0.85	2.43	-.02	2.49	1.97	.06
Gratitude Type												
Verbal	-0.02	2.42	< .01	-0.96	1.96	-.03	-3.01	3.15	-.06	3.85	2.56	.09
Concrete	-1.02	2.56	-.02	-0.42	2.07	-.01	2.44	3.33	.05	-0.47	2.71	-.01
Connective	-1.22	2.59	-.03	-0.62	2.10	-.02	1.56	3.37	.03	1.31	2.74	.03†
R^2		0.01			0.02			0.02			0.01	
F		1.18			1.39			1.70			1.14	

Note. Step 2 of analyses included in table. † $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

APPENDIX B

THE RASH QUESTIONNAIRE

We would like to know which of the following characteristics are important for your child **when he or she has become an adult**. There are no right or wrong answers. We need your personal opinion. Please look at the questions in the table below, and answer each question, one by one, giving your response from 1 to 9. Your choices are:

1 = Absolutely Not Important (ANI);

2

3 = A Little Important (ALI);

4

5 = Quite Important (QI);

6

7 = Important (I);

8

9 = Supremely Important (SI).

For example, if you value a characteristic between 7 (Important) and 9 (Supremely Important) you can mark 8; if you can't decide between 5 (Quite Important) and 7 (Important) you can mark 6.

For each of the following questions, please respond from 1 (Absolutely Not Important) to 9 (Supremely Important)	1 AN I	2	3 AL I	4	5 QI	6	7 I	8	9 SI
How important is it that your child, when an adult...									
A. ... follows the norms of society?	1	2	3	4	5	6	7	8	9
B. ... does what he or she thinks should be done, regardless of what others will think?	1	2	3	4	5	6	7	8	9
C. ... tries to reach his or her goals without anyone else's help?	1	2	3	4	5	6	7	8	9
D. ... prefers to spend time alone rather than with others?	1	2	3	4	5	6	7	8	9
E. ... fulfills his or her work-related duties without question?	1	2	3	4	5	6	7	8	9
F. ... likes to live without many ties to others?	1	2	3	4	5	6	7	8	9
	1 AN I	2	3 AL I	4	5 QI	6	7 I	8	9 SI
G. ... cares for the well-being of others?	1	2	3	4	5	6	7	8	9
H. ... does things in traditional ways?	1	2	3	4	5	6	7	8	9
I. ... does the things that other people expect of him or her?	1	2	3	4	5	6	7	8	9
J. ... maintains good relationships with many people?	1	2	3	4	5	6	7	8	9
K. ... cares about others' feelings?	1	2	3	4	5	6	7	8	9
L. ... tries not to depend on someone else to achieve his or her goals?	1	2	3	4	5	6	7	8	9
M. ... chooses his or her own goals?	1	2	3	4	5	6	7	8	9
N. ... prefers to live alone?	1	2	3	4	5	6	7	8	9
O. ... typically decides on a course of action without help from others?	1	2	3	4	5	6	7	8	9
P. ... obeys people in authority?	1	2	3	4	5	6	7	8	9
Q. ... feels close to many people?	1	2	3	4	5	6	7	8	9
R. ... takes advice from parents or other family members before making decisions?	1	2	3	4	5	6	7	8	9
S. ... keeps personal issues to himself or herself?	1	2	3	4	5	6	7	8	9
T. ... is loyal to his or her friends?	1	2	3	4	5	6	7	8	9
U. ... makes decisions about what to do without being influenced by others' opinions?	1	2	3	4	5	6	7	8	9
V. ... feels well connected to other people?	1	2	3	4	5	6	7	8	9
W. ... always does what his or her family wants?	1	2	3	4	5	6	7	8	9
X. ... prefers to live his or her own life separate from others?	1	2	3	4	5	6	7	8	9

Y. ... <i>is not emotionally dependent on others?</i>	1	2	3	4	5	6	7	8	9
Z. ... <i>is well connected to the extended family (grandparents, aunts, cousins, etc.)?</i>	1	2	3	4	5	6	7	8	9
AA. ... <i>feels no need to keep in touch with other people?</i>	1	2	3	4	5	6	7	8	9
BB. ... <i>is concerned about his or her friends' well-being?</i>	1	2	3	4	5	6	7	8	9
CC. ... <i>avoids doing things that other people say are wrong?</i>	1	2	3	4	5	6	7	8	9
DD. ... <i>conducts his or her life in accordance with his or her own convictions?</i>	1	2	3	4	5	6	7	8	9

List the three characteristics that are **MOST** important to you. 1 (**most** important of all):

_____ (put its letter); 2 _____ (put its letter); 3 _____ (put its letter)

List also the three characteristics that are **LEAST** important to you 1 (**least** important of all):

_____ (put its letter); 2 _____ (put its letter); 3 _____ (put its letter)

APPENDIX C

THE DEVELOPMENT OF GRATITUDE INTERVIEW

Thank you for being part of our study. First, for our records, are you the parent most responsible for raising [child's name]? _____ [If not, who is, and do you think that he/she would be interested in participating?] Who else is responsible for raising [child's name]?

I know that we already asked this information, but we'd just like to check:

Could you please tell us your highest level of education? [Appropriate levels for the given society]

____ less than high school; ____ high school; _____ some college, including Associates (2-year) degree; ____ a college (4-year) degree; ____ some graduate study; ____ MA/MS; ____ PhD

Ask the same question for the person who is next most likely to be responsible for raising the child.

____ less than high school; ____ high school; _____ some college, including Associates (2-year) degree; ____ a college (4-year) degree; ____ some graduate study; ____ MA/MS; ____ PhD

And your job? _____ What do you do typically at work? [ask questions to be sure about the likelihood of needing to obey a boss, or being able to use self-direction, etc.)

And the other person responsible for raising your child? [Go over education and occupation in the same way, unless it's clear that there isn't anyone who is also responsible.]

And where were you born? _____ How long have you lived in [this city]?

[For those who were born in another country, ask how long they've lived in this country]? _____

And the other person who's responsible for the child? [Same questions]

What other languages, besides [the language that's being spoken during the interview] do people use at home?

Thanks for filling out the Parents' Values for their Children (PVC). You think that these three characteristics are the ones that you'd most like to see your child develop. Why did you choose these particular ones? And you listed these three as the ones that you least value. Can you explain why? [Follow up where necessary, so that you get a good sense of why the parent values these a lot and a little.]

In the recent past, can you recall a situation or an occasion in which someone helped you to do something that it might have been difficult to do alone or gave you something of value? What did the person do for you or give you? Can you remember what your feelings were towards that person at that time? And since then, do you feel anything for that person? [Probe with questions such as: What did the person's kindness mean to you and how did you feel (or do you still feel) about that person?]

Can you sum up in one word how you felt about that person?

I'm particularly interested in your thoughts regarding gratitude. I noticed that in your set of most important values, you circled "gratitude" as _____. Can you explain why? What does gratitude mean to you? [In case gratitude wasn't mentioned before: Is it different from the feeling you described above?] In what situations do you think it is appropriate to feel gratitude? How would you express that gratitude? Is there anything else you might do? Are there situations or occasions in which you might do something different? Why or why not?

Are there things that you think [child's name] should be grateful for? Why?

In what situations or occasions do you feel it is appropriate for [child's name] to express gratitude and how does he/she typically express that gratitude? [Probe: What does he/she say or do or feel in those situations or on those occasions?] Is the response different in other situations or on other occasions? How, or how not?

In what situations or on what occasions is [child] **most** likely to show gratitude? What does s/he say or do or feel in those situations? [Why do you think that s/he does/says that? Do you try to influence him/her in any way? If "yes" ask how.]

In what situations or occasions is [child] **least** likely to show gratitude when you think that he/she should? Why do you think that is? [If the parent says that the child always shows gratitude, ask what the parent would do if the child did not: "Suppose [child] did not show any gratitude and you thought that s/he should, what, if anything would you do?"]

Do you think [child's] response of gratitude depends upon the act, or the benefactor (the person who helped or gave something), or on both? In other words, does it depend upon what was done for [child] or who was doing it, or both? Does this ever vary (for example, if a relative that [child] doesn't like very much gives him/her a nice gift)? [If

it's not yet clear: Do you think that s/he's more grateful for the present or the help (in other words, what s/he's gained) or more grateful for the person who gave or helped him/her.]

Are there situations in which you think [child] should be more grateful than [he/she] is? Can you give some examples of these situations? Why did you think that s/he should have been more grateful? Did you do or say anything to him/her at the time or afterwards? [If the parent has already said that the child is always grateful, ask something like: "I know that you said earlier that if [child] didn't show gratitude when you thought s/he should you might say/do xxx; is there anything else that you might say or do?]

Can you recall an event or incident in which [child] remembered a kind or generous act and talked about it to you? Did [child] express a need to do something for that person? What did he/she do or say or feel? Is this typical for how [child] responds to this type of act, or was this event something special? [In case the parent can't remember any situation: Even if [child] hasn't actually talked to you about this type of act (kindness or a generous act), do you think that s/he feels a need to do something in return for the other person? Can you think of any examples?] [If the parent has only mentioned the child saying "thank you" ask whether the child ever says anything about doing something for the person, and if there have been no examples at all, try "Suppose [child] had received some help or a very nice gift, would s/he ever think of doing anything for that person?"]

Thinking about [child's] life this past year, would you say that he/she had:
1 nothing to be grateful for; 2 not much to be grateful for; 3 a little to be grateful for; 4 a lot to be grateful for; 5 an awful lot to be grateful for. [Unless the parent has made very clear why s/he has answered this way, ask for the reason.]

If you had to express how grateful [child] is, and 1 means "not at all grateful" and 5 means "extremely grateful", where would you put him/her on the line between 1 and 5? [Unless the parent has made very clear why s/he has answered this way, ask for the reason.]